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PROPOSED PROGRAMME (2014–2017)

AND BUDGET (2014–2015)

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LETTER OF TRANSMITTAL

In accordance with the requirements of the Statute, the Director has the honour to submit the Proposed Programme Budget of the International Agency for Research on Cancer for the financial period 2014–2015.

A handwritten signature in black ink, appearing to read 'C. Wild', with a horizontal line underneath.

Christopher P. Wild, PhD
Director
International Agency for Research on Cancer

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EXECUTIVE SUMMARY

The present Proposed Programme sets out the main lines of the Agency's research strategy and planned activities for the period of 2014–2017. These follow the structure and priorities defined in the IARC Medium-Term Strategy and Implementation Plan for 2010–2014 (GC/52/6) centred on six core areas:

Describing the Global Cancer Burden — collection, storage, and statistical analysis of data on cancer to provide accurate estimates of prevalence, incidence, survival, and mortality; improved coverage and quality of cancer registration through support to cancer registries.

IARC Monographs — evaluation of evidence regarding the possible causal association between risk factors and cancer; evaluation of the effectiveness of cancer prevention strategies.

Cancer Etiology — interdisciplinary studies to investigate the causes of human cancer, including the role of environmental, lifestyle, and genetic factors and their interaction.

Mechanisms of Carcinogenesis — study of the molecular mechanisms of carcinogenesis to provide: insights into the biological plausibility of risk-factor–disease associations; potential biomarkers of exposure, susceptibility, and disease; and a scientific rationale for interventions.

Cancer Prevention — evaluation of the effectiveness of intervention strategies, including their implementation in particular socioeconomic and cultural settings; evaluation of national programmes, providing evidence on optimal implementation.

Education and Training — training of new generations of cancer researchers through fellowships and courses based on the main areas of scientific expertise at the Agency (epidemiology, biostatistics, and laboratory sciences).

In addition to these six core areas of activity, there are three generic areas that provide support across the Agency:

Methodology and Research Tools — development and validation of new or improved research methods for application in epidemiology and laboratory studies.

Scientific Support — provision of common resources and services that underpin and support the work of all research groups.

Research Leadership and Management — definition and implementation of the Agency's scientific strategy and programme.

The Proposed Programme 2014–2017 is built around collaboration with national, regional, and international partners, with the Agency frequently exerting leadership and coordinating roles. The Proposed Programme also reflects the growing requirement for interdisciplinary research, which integrates the latest molecular and population-based knowledge to address the causation and prevention of cancer.

The associated budget sets out the planned allocation of resources for the main areas of activity described above. The total proposed budget for 2014–2015 is €41 214 017, representing an overall increase of 4.55% from the 2012–2013 approved budget. This budget will ensure the minimum non-staff budget required and absorb the 6.28% increase in staff cost.

In 2014–2015, Turkey will pay its full assessed contribution, which will be used to maintain the non-staff budget at the floor level and partially offset the staff cost increase. To fund the remaining gap caused by statutory staff cost increases, we propose a continued though reduced strategic use of the Governing Council Special Fund and a 1.98% overall increase in the assessed contributions on Participating States from 2012–2013 levels. During preparations of the 2014–2015 Programme and Budget, this translated into additional contributions from Participating States of between 1.16% and 2.80%. The adoption of the revised scale of assessments under the United Nations General Assembly resolution 67/238 and confirmed in the WHO Executive Board in January 2013, created a substantial change in distribution of financial burden across the IARC Participating States causing a revision to this document since submission to the Scientific Council. While the overall proposed budget level remains the same, the assessed contributions from Participating States presented in this revised document are affected by a redistribution of substantial amounts from those Participating States whose scale of assessments will reduce as of 2014. The effects of this redistribution are made transparent in the submitted budget tables.

The Agency has thus developed a Proposed Programme and associated budget that takes into account the current economic constraints faced by Participating States, allows IARC to pursue its activities in accordance with its mission, and places it in a favourable position to respond to the demands and exciting opportunities of the future.

1. SCIENTIFIC STRATEGY 2014–2017

The scientific strategy reflected in the Proposed Programme continues to be founded on the unique strengths of IARC's approach: conducting **international collaborative research** projects involving a wide network of partners; using an **interdisciplinary approach** that promotes the integration of laboratory and epidemiological methods; a **worldwide mandate** with a specific focus on conducting research relevant to low- and middle-income countries; and a **commitment to education and training** to form the next generation of cancer researchers. The success of this approach is facilitated by IARC's position as an international agency within the UN/WHO family.

IARC's statutory reporting cycles mean that the Proposed Programme and Budget stretch beyond the current Medium-Term Strategy and Implementation Plan for 2010–2014. However, the two documents are consistent and the Proposed Programme will be reflected in the Agency's next Medium-Term Strategy.

In terms of the priority areas, the scientific strategy remains centred on the core subjects identified in IARC's statutes:

- Planning, promoting, and developing research in all phases of the causation, treatment, and prevention of cancer;
- Collection and dissemination of information on the epidemiology of cancer, on cancer research, and on the causation and prevention of cancer throughout the world;
- Studies on the natural history of cancer;
- Education and training of personnel for cancer research.

The Agency has an increasing focus on conducting research that supports cancer prevention. Prevention is at the heart of the Agency's mission because it is essential to addressing the projected rise in the burden of cancer over the next two decades, particularly in low- and middle-income countries. The UN High-Level Meeting on non-communicable diseases in September 2011 recognized the central role of prevention as "the cornerstone of the global response to non-communicable diseases". IARC's orientation towards prevention comprises four major themes: describing occurrence, elucidating causes, evaluating interventions, and supporting implementation.

The Proposed Programme relies on excellence in research leadership. A strong scientific team has been established at IARC with senior scientists taking leadership roles, supported by a dynamic mix of mid-career scientists, visiting scientists, fellows, and support staff.

The fulfilment of the Agency's Proposed Programme also relies increasingly on significant resources obtained through extra-budgetary funding. Competitive grant applications won by IARC staff represent about one third of total IARC expenditure. The Proposed Programme relies on a similar level of income being attracted in voluntary contributions during the budget biennium 2014–2015.

The operational structure and total numbers of staff have remained stable since the previous Proposed Programme and Budget. The programme comprises nine research Sections (each with one or more research Groups): Cancer Information (CIN), IARC Monographs (IMO), Mechanisms

of Carcinogenesis (MCA), Molecular Pathology (MPA), Infections (INF), Environment and Radiation (ENV), Nutrition and Metabolism (NME), Genetics (GEN), and Early Detection and Prevention (EDP). The four Groups within the Director's Office also remain unchanged: The Gambia Hepatitis Intervention Study (GHIS), Communications (COM), Education and Training (ETR), and Laboratory Services and Biobank (LSB). The latter three Groups have a wide range of activities across the Agency.

There were two changes in the research Groups within Sections. First, within MCA the Molecular Carcinogenesis Group was renamed the Molecular Mechanisms and Biomarkers Group (MMB), to reflect the greater emphasis on translation of research findings to applications in epidemiology. A new Group Head was recruited in line with this emphasis. Second, a new Group was created in EDP, the Prevention and Implementation Group (PRI). This reflects the increasing importance of this area in the Agency's scientific programme and signals the commitment of the Agency to its development. The Group is headed by a recently recruited senior scientist with an international reputation in this field.

Finally, the Division of Administration and Finance was renamed the Section of Support to Research (SSR), to better reflect the dedication of the Groups in this Section in supporting the implementation of the scientific programme of the Agency. A narrative describing the aims and the breadth of work of this Section is included within Section 3. The interdisciplinary and integrated approach that characterizes the Agency's research most frequently involves contributions from several Sections. Therefore, while the Proposed Programme and Budget follow the structure of the six core areas of scientific activity defined in the Medium-Term Strategy and Implementation Plan for 2010–2014, it is clear that any one Section has activities across a number of these main areas. Despite this, the Sections can be broadly aligned within specific areas, as listed here:

- 1. Describing the Global Cancer Burden (Section of Cancer Information)** — collection, storage, and statistical analysis of data on cancer to provide accurate estimates of prevalence, incidence, survival, and mortality; support to ensure improved coverage and quality of cancer registries, particularly in low- and middle-income countries; provision of timely and user-friendly access to reliable national and regional data to a variety of stakeholders for cancer control planning.
- 2. IARC Monographs (Section of IARC Monographs)** — evaluation of evidence regarding the possible causal association between risk factors and cancer; evaluation of the effectiveness of cancer prevention strategies; development of the programme to incorporate evidence from mechanistic studies and to complement hazard identification with more quantitative estimates of risk associated with given exposures.
- 3. Cancer Etiology (Section of Infections, Section of Nutrition and Metabolism, Section of Genetics, Section of Environment and Radiation)** — use of an interdisciplinary approach to investigate the causes of human cancer, including the role of environmental, lifestyle, and genetic factors and their interaction; emphasis on cancers of importance in low- and middle-income countries for which etiology remains ill-defined; consideration of life-course exposures, including the impact of events in the perinatal period;

making use of population-based cohorts and multicentre case–control studies with associated biobanks.

4. Mechanisms of Carcinogenesis (Section of Mechanisms of Carcinogenesis, Section of Molecular Pathology) — study of the molecular mechanisms of carcinogenesis to provide insights into the biological plausibility of risk-factor/disease associations; development and validation of biomarkers of exposure, susceptibility, and disease; exploration of molecular alterations in tumours and their relation to environmental and lifestyle exposures as well as to prognosis.

5. Cancer Prevention (Section of Early Detection and Prevention) — evaluation of the effectiveness of community-based prevention strategies, including factors affecting their implementation in particular socioeconomic and cultural settings; evaluation of public health interventions and provision of the evidence base for further optimization of these programmes; focus on cost-effective interventions applicable to low- and middle-income countries.

6. Education and Training (Education and Training Group) — training of new generations of cancer researchers through fellowships and courses based on the main areas of scientific expertise at the Agency (epidemiology, biostatistics, and laboratory sciences); creating key strategic partnerships in cancer research training; maintaining active working relationships with past fellows, course attendees, etc., to expand the network of external collaborators.

In addition, there are three generic, support areas, as listed here:

7. Methodology and Research Tools — aimed at developing new or improved research methods with relevance to activities across the Agency: development of statistical expertise to ensure high-quality statistical support and stimulate methodological research; improving methods for exposure assessment in large-scale epidemiological studies, particularly in relation to environmental and lifestyle risk factors; identification and validation of molecular biomarkers for prediction of cancer risk, early detection and diagnosis, prognosis, and etiological research; production of the WHO Classification of Tumours series (WHO Blue Books), the definitive reference work for tumour classification in research and clinical practice.

8. Scientific Support — includes common resources and services that underpin and support the work of all research groups: coordinating the development and provision of central facilities and specialized resources supporting the work of the laboratory groups; management of the collections of human samples in the IARC Biobank, providing an essential tool for epidemiological research on cancer; supporting the production of high-quality scientific publications and providing access to scientific information; promoting the dissemination of the Agency's scientific output through an integrated communications programme, enhancing the visibility of and access to the Agency's activities and resources.

9. Research Leadership and Management — concerns the areas of activity relating to the definition and implementation of the Agency's scientific strategy and programme: development of a research programme that supports the achievement of the Agency's objectives and provides the vision, direction, and resources for its continuing success;

management of the scientific programme at an operational level in each of the Sections and Groups; promoting an organizational culture that motivates staff and ensures their continuing professional development and training; providing leadership in the consistent application of ethical standards for research involving human subjects conducted in different regions of the world.

An international leadership role

The global focus on non-communicable diseases, highlighted at the UN High-Level Meeting on non-communicable diseases in September 2011, demonstrated the paucity of data on these conditions in low- and middle-income countries (LMICs). Research is a key component of public health planning, providing an essential evidence base for the development and implementation of effective cancer prevention and control initiatives. The Agency has a vast experience of carrying out and coordinating research in LMICs that stems from its unique mandate and status within WHO. It is thus excellently placed to provide leadership in setting and contributing to the research agenda for cancer prevention and control in these regions.

The Agency exhibits this leadership predominantly through its collaborations and coordinating role in multicentre, transnational research projects and programmes. This direct involvement with the national and regional research communities involves addressing specific questions of importance for effective cancer control and in doing so makes a valuable contribution to building research capacity among our partners in a sustainable manner.

IARC will continue to work in close partnership with WHO in a number of specific areas arising out of the Political Declaration of the UN High-Level Meeting. In particular, the Agency has a leading role to play in cancer surveillance, through its technical support to cancer registries and through the coordination of the Global Initiative for Cancer Registry Development in Low- and Middle-Income Countries (GICR), as well as in the provision of expertise in the areas of cancer screening, vaccination, and dietary assessment. It will continue to seek and develop partnerships with other international organizations that share its objectives, including the Union for International Cancer Control (UICC) and the International Atomic Energy Agency's Programme of Action for Cancer Therapy (IAEA/PACT), and to establish close working relationships with regional cancer networks, in order to jointly identify priorities for action and develop regional strategies for collaborative research.

Finally, the Agency will continue to work closely with its network of partners in research and civil society and with WHO, in supporting advocacy for the adoption of national and international policies for the prevention and control of cancer, centred on the needs of LMICs throughout the world.

2. DETAILED SCIENTIFIC PROGRAMME 2014–2015

Area 1 Describing the Global Cancer Burden

IARC is the definitive reference source for the provision of information about global statistics on the burden of cancer. The monitoring of cancer occurrence provides baseline information for the development of cancer control planning, for the evaluation of public health interventions, and for etiological research programmes. To undertake this activity, the Section of Cancer Information (CIN) coordinates the systematic collection, analysis, and dissemination of data from cancer registries worldwide. In order to increase the worldwide coverage and quality of population-based cancer registry data, CIN leads, on behalf of IARC, the Global Initiative for Cancer Registry Development in Low- and Middle-Income Countries (GICR), a multi-agency programme to support capacity building in countries presently lacking high-quality registries.

Objectives

- To collect, analyse, and disseminate timely information about the global cancer burden;
- To provide a definitive set of global indicators on the burden of cancer derived from routine sources, using, where applicable, novel methodological approaches and new sources of information about the burden of cancer;
- To develop web-based, user-friendly global cancer statistics tools;
- To increase the coverage and quality of population-based cancer registration, particularly in LMICs;
- To provide support to cancer registries worldwide in terms of development, staff training, promotion of common standards for coding and classification, and advocacy, ensuring effective use of the data they produce;
- To conduct a programme of research on the descriptive epidemiology of cancer including geographical analyses, time trends, and the estimation of the future burden of the disease.

Present plans

Cancer Incidence in Five Continents (CI5) has been published in nine successive volumes since 1966, with volume X, covering the 2003–2007 period, due in 2013. This publication contains comparable worldwide cancer incidence data provided by high-quality cancer registries. Data from CI5 are made available through the *CANCERmondial* web site, which also gives access to cancer mortality data, provided by WHO, together with other relevant tools including GLOBOCAN, *SurvCan*, and *International Incidence of Childhood Cancer (IICC)*. GLOBOCAN provides estimates of cancer incidence, mortality, prevalence, and disability-adjusted life years lost for all countries of the world. Current incidence and mortality estimates for 2008 will be updated to those for 2012 in mid-2013. *SurvCan* provides data on cancer survival from selected population-based cancer registries, mainly in LMICs. It is planned to update and expand the registry sources of such statistics during the period 2013–2015. The IICC series provides global data about cancer incidence among children (0–14 years), and volume III, to be published in 2013, will include data up until 2008 classified according to the third edition of the *International*

Classification of Childhood Cancer and will extend the analyses into the adolescent age range (15–19 years).

IARC established GICR in 2011, in partnership with a broad range of international organizations, to build cancer registration capacity in LMICs through a series of IARC Regional Hubs for Cancer Registration. Several IARC Regional Hubs are being launched across three continents, notably in Mumbai, India; Izmir, Turkey; and through the African Cancer Registry Network acting as a consortium providing coordination activities in sub-Saharan Africa. A further hub for registries in Latin American and Caribbean countries is foreseen in 2013. With partners in GICR, IARC is involved in fundraising and advocacy initiatives to support this programme.

As well as arranging training courses on cancer registration methods, both at IARC and at targeted locations within Africa, Asia, and Latin America and the Caribbean, CIN supports and continues to enhance the CanReg5 registration software package, and is developing new registry training materials, including online modules suitable for distance learning. These will be integrated with a new edition of the publication *Cancer Registration – Principles and Methods*. CIN continues to provide administrative facilities and a secretariat for the International Association of Cancer Registries (IACR).

CIN conducts a programme of research focused on descriptive epidemiology. Core components include the study of temporal trends and patterns in the occurrence of and outcomes from cancer, as well as the development of methodological approaches to their analysis. CIN makes use of the global information available to produce novel analyses describing cancer patterns worldwide and by region, the latter defined geographically and by level of human development.

Future directions

To be fit for the purpose of providing a modern interactive portal for presenting the varied and expanding elements of global cancer data, the *CANCERmondial* web site requires redevelopment in order to make optimal use of the latest web technology and to improve its flexibility and user-friendliness. At the same time IARC, in its collaboration with the IACR, needs to provide a unified web presence for population-based cancer registries throughout the world in order to make available a platform on which they can disseminate their latest figures as online reports. The redesign of both *CANCERmondial* and the IACR web sites will facilitate greater use of the registry data sets maintained by IARC, especially those from LMICs, even when these data do not meet the full quality standards required by CI5. These can then be used for analytical purposes in order to produce comparative reports and to support collaborative research activities.

CIN will also be making use, where available, of extensions to standard cancer registration data sets to examine incidence trends in relation to, for example, stage of disease at diagnosis and the introduction of population-based screening programmes. Particular efforts will be made to extend registry data sets relating to childhood cancer because of the relatively low case numbers. It is intended to pilot incorporation of detailed information available at and after diagnosis (e.g. relating to treatments) and from long-term follow-up. It is also planned to create a GLOBOCAN-like utility specifically for childhood cancer.

After careful evaluation of the activities and the impact of the first regional hubs, it is planned to roll out the full programme envisaged by GICR and ensure its sustainability. This should result in a substantive increase in the quality of the information from such countries, which can form the basis of new research programmes and a foundation for cancer control.

Research in descriptive epidemiology will continue to provide new insights into the global cancer burden and the changing cancer profiles observed in light of ongoing demographic and epidemiological transitions as populations move towards higher social and economic development. It will be timely to provide a new monograph on international time trends of cancer and new approaches to presenting trends in multiple indicators (incidence, mortality, and survival).

CIN will also track the impact of such anticipated changes on the future cancer burden, and provide a set of “what if?” prevention scenarios that could potentially reduce the cancer burden in the next decades should realistic cancer control interventions be implemented.

Resources 2014–2015

Regular budget:	allocation	€ 2 736 221
	approved posts	11
Extra-budgetary resources:	allocation	€ 40 000
	approved posts	-

Area 2 IARC Monographs

The first step in cancer prevention is to identify the causes of human cancer. National and international health agencies can then take action to prevent avoidable exposures to known or suspected carcinogens. Individuals, too, can use this information to make better choices that reduce their exposure to cancer-causing agents. The *IARC Monographs* are a series of scientific reviews that identify environmental factors that can increase the risk of human cancer. Since 1971, the programme has evaluated more than 900 agents and identified more than 400 known, probable, or possible causes of human cancer.

Objectives

- To evaluate the scientific evidence concerning the potential carcinogenicity of environmental, lifestyle, and occupational factors of public health importance;
- To consider the relevance of experimental models through comparison between tumours in experimental animals and humans in relation to the same exposure;
- To review mechanisms of human carcinogenesis and the use of mechanistic data, including biomarkers, in carcinogen evaluation;
- To relaunch the IARC Handbooks of Cancer Prevention with their original, broader scope on preventive agents, prevention initiatives, and cancer screening.

Present plans

During the 2014–2015 biennium, in addition to developing 2–3 volumes of *IARC Monographs* per year, IMO will convene a workshop to assess the needs, opportunities, and caveats for including more quantitative assessments of carcinogenic risks to humans in the *IARC Monographs* programme. In 2014, an Advisory Group on the future priorities of the *IARC Monographs* will be convened. This Advisory Group meeting will also review principles and procedures used in developing the Monographs.

The proposal to relaunch the IARC Handbooks of Cancer Prevention with their original, broader scope has been strongly endorsed by the Scientific Council and Governing Council 2012. The Agency is currently seeking governmental and non-governmental organizations as partners to provide resources to enable the future development of this programme. Priority topics include screening for breast and cervical cancer, weight control and physical activity, and sunscreens.

The programme is also continuing its initiative to increase public access to *IARC Monographs* information. We are making all volumes and supplements freely available on our web site, adding an e-pub format to provide additional capabilities to Monograph users, and compiling an electronic database of Monograph findings that will include cancer sites and mechanisms. This database will be one of the pillars of a web-based platform, for external use, where major databases from MPA, IMO, CIN, and others will be interlinked in order to show for a specific cancer site, from one single portal entry, all information available on pathology, descriptive epidemiology, and risk factors. We are further streamlining the workflow from the moment of decision on a Monograph's topic to the printing of the final volume.

Future directions

The insights generated from the two Workshops building on the Volume 100 series of the *IARC Monographs*, on "Tumour concordance between humans and experimental animals" and "Mechanisms involved in human carcinogenesis", the initiative to relaunch the IARC Handbooks of Cancer Prevention, and the recommendations on quantitative assessments of carcinogenic risks to humans will be brought together and discussed by an international Advisory Group in early 2014. The Advisory Group will recommend new high-priority topics for consideration by the *IARC Monographs* programme; review the potential need for amendment of the Preamble to the *IARC Monographs*, particularly regarding further evolution of the use of mechanistic and cancer bioassay data in cancer hazard identification; and review the need for a new series on quantitative risk assessment, and the development of the IARC Handbooks of Cancer Prevention.

Resources 2014–2015

Regular budget:	allocation	€ 1 974 841
	approved posts	6.75
Extra-budgetary resources:	allocation	€ 1 193 653
	approved posts	5.5 (2014) / 3.67 (2015)

Area 3 Cancer Etiology

The elucidation of the causes of cancer has been an active area of the work of IARC since its inception. IARC studies in this area involve extensive collaborations with multiple partners outside of the Agency, typically in the form of large multi-partner epidemiological studies, and are frequently undertaken in LMICs. They also often involve a combination of questionnaire and biomarker analyses based on biological specimens. Cancer etiology is covered under four sub-areas. Sub-area 3.1 covers epidemiological studies on the role of infections and cancer, whereas sub-area 3.2 concerns the role of nutrition and metabolism. Sub-area 3.3 focuses on genetics, including gene–environment interactions, while sub-area 3.4 concerns the role of environment, radiation, lifestyle, and occupation. Finally, statistical work in all four sub-areas contributes to methodological studies of cancer research and is described under Methodology and Research Tools (sub-area 7.1).

3.1 Infections

Objectives

Infections are responsible for at least 16% of human cancers worldwide (approximately 2 million new cancers per year). However, infections cause less than 4% of cancers in Australia and the USA but up to one third of those in sub-Saharan Africa. The Section of Infections (INF) will lead a number of projects in this sub-area aimed at gaining insight into different aspects of infectious agents: their potential role in human cancer, factors that influence the natural history of infections, biological properties of strains and the natural variants of the different infectious agents, and ways to prevent infections and their cancer sequelae.

Present plans

The main subjects of projects in the 2014–2015 biennium are human papillomavirus (HPV; mucosal and cutaneous types), Merkel cell polyomavirus (MCV), hepatitis B virus (HBV), human immunodeficiency virus (HIV), and Epstein–Barr virus (EBV). Laboratory work will include two projects, focusing on: (i) biological properties of a broad range of infections, including HPV, HBV, and MCV, associated with human carcinogenesis; and (ii) development and use of novel diagnostic tools to determine the presence of DNA from infectious agents in different human cancers, notably cancers of the cervix, head and neck, and skin. Epidemiological studies will comprise three projects, focusing on: (i) new HPV vaccination and cervical screening programmes in low-resource countries and the role of HPV in cancers other than cervix uteri (notably in the tonsils); (ii) the excess of cancer in people with HIV/AIDS; and (iii) novel statistical approaches to estimate the burden of infection-associated cancers and the impact of preventive measures.

Future directions

Projects in the 2014–2015 biennium will increasingly focus on the evaluation and strengthening of recently introduced prevention strategies (notably HPV vaccination and cervical screening programmes based on HPV testing). The two countries that were the first to introduce successful HPV vaccination programmes in Asia (Bhutan) and Africa (Rwanda) will provide the earliest information on HPV vaccine effectiveness in low-resource countries.

Resources 2014–2015

Regular budget:	allocation	€ 3 029 035
	approved posts	12.40
Extra-budgetary resources:	allocation	€ 1 041 273
	approved posts	1.44 (2014) / 1.41 (2015)

3.2 Nutrition and metabolism

Diet, nutrition, metabolic/hormonal imbalances, excess energy consumption, obesity, and physical inactivity are thought to be important contributors to increasing cancer incidence rates worldwide. However, the mechanisms of action of these factors remain poorly understood. In addition, the contributing influence of dietary transitions from traditional to Western-type diets, which is taking place in LMICs (e.g. in Latin America), and exposures in fetal life/early infancy are not well studied.

Objectives

The main objective of the Section of Nutrition and Metabolism (NME) is to investigate associations between lifestyle and cancer and to provide a better understanding of the underlying mechanisms whereby diet (including dietary patterns), nutrition, physical activity, and energy imbalance may affect cancer causation, development, and survival. This can be addressed through an interdisciplinary approach using dietary assessment tools, biomarkers, and metabolomics. This approach enables the study of cellular, biochemical, and physiological changes resulting from specific dietary intakes, physical activity, and other lifestyle factors and their relation to gene–diet/nutrient/environment interactions in large epidemiological (cohort and case–control) and intervention studies in human subjects (see also sub-area 7.3).

Present plans

NME will continue the coordination, maintenance, and updating of the databases of the European Prospective Investigation into Cancer and Nutrition (EPIC) study, taking a leading role in the study of major cancer sites (breast, endometrium, ovaries, colorectum, liver, and pancreas). NME will also continue its close involvement in a large EC FP7-funded consortium (14 cohorts) on healthy ageing (CHANCES) with special focus on cancer and the exploration of the dietary, lifestyle, and metabolic determinants of healthy ageing. A new axis of research has been initiated on breast cancer in LMICs, in particular in Latin America, with extensive fieldwork to recruit a large series of breast cancer cases to determine predictors of specific molecular subtypes and clinical outcomes. The NME Section has also established the Latin American Birth Cohort Consortium on Healthy Growth and Development to evaluate the role of early-life exposures on health events in adulthood. These studies aim to explore metabolic factors related to cancer risk and to elucidate some of the underlying mechanisms of the diet–metabolism–cancer associations by combining information on lifestyle, anthropometry, and diet with biomarkers (nutrition, food contaminants, hormones, metabolomics) and genetic and epigenetic factors.

Future directions

Large cohorts and multicentre case–control studies will be used to identify the role and mechanisms by which diet, physical activity, obesity and metabolic disorders such as diabetes affect cancer incidence and survival. Particular emphasis will be placed on a lifespan approach bringing together studies of early markers of cancer risk within birth cohorts; the occurrence of cancer at younger ages (e.g. premenopausal breast cancer); comparison of tumour characteristics and stage at diagnosis between different countries and subjects of different ethnic origins; and determinants of healthy ageing. Methodological development to incorporate multimorbidities, competing risks, and pathway analyses will be performed. Translation of the findings into public health recommendations and the development of appropriate cancer prevention strategies will be emphasized.

Resources 2014–2015

Regular budget:	allocation	€ 1 313 240
	approved posts	5
Extra-budgetary resources:	allocation	€ 247 077
	approved posts	-

3.3 Genetics

Objectives

Genetic studies carried out at IARC aim to identify new cancer genes and genetic variants through large collaborative population-based studies and, in specific instances, family-based studies. They are developed taking into consideration the global and regional burden of a particular cancer and the extent to which it is under-studied by other national or international groups. This has led to a focus on a range of cancers including common yet under-studied cancers (e.g. lung cancer), less frequent cancer types (kidney and aerodigestive tract cancers), and rare cancers (nasopharyngeal carcinoma and Hodgkin lymphoma). An important objective is to investigate the extent to which newly identified susceptibility genes interact with known environmental risk factors or point to new non-genetic risk factors that have not been identified by more traditional means.

Present plans

Population-based studies within the Section of Genetics (GEN) will continue to involve extensive amounts of fieldwork with the goal of recruiting large series of cases and controls comprising extensive questionnaire information and biological samples. The current focus will continue to be on lung cancer and renal cancers within central Europe, and head and neck cancers within Latin America. These studies will also incorporate extensive follow-up for clinical outcome. Genetic analysis involves a combination of extensive genome-wide analysis and sequencing. Whenever possible, these studies will be coordinated within international consortia, resulting in extremely large studies from multiple diverse populations. GEN will also conduct extensive evaluation of non-genetic factors, usually using biomarkers; examples are HPV in head and neck cancers, and dietary biomarkers for lung cancer. The Section will also continue to investigate the genetic

susceptibility of cancers related to EBV, in particular the role of HLA in Hodgkin lymphoma and nasopharyngeal cancer.

Future directions

Genetics continues to develop rapidly, with an increasing importance of large-scale sequencing of multiple genomes, and extensive bioinformatics analysis. GEN will continue to act at the forefront of this field, and will place an emphasis on using its extensive and unique bio-repositories for innovative and timely genetic analyses to contribute to our understanding of disease etiology and outcome. Such analyses may occur in-house or may be conducted with national genome laboratories.

Resources 2014–2015

Regular budget:	allocation	€ 1 858 404
	approved posts	7.99
Extra-budgetary resources:	allocation	€ 2 196 855
	approved posts	3

3.4 Environment, radiation, lifestyle, and occupation

Objectives

The overall objectives are to investigate environmental, lifestyle, occupational, and radiation related causes of cancer in human populations, with the aims to contribute to primary prevention of cancer and to increase the understanding of biological mechanisms of carcinogenesis. Environmental causes of cancer, including environmental contaminants or pollutants, exposures in the workplace, and natural or man-made radiation, can make substantial contributions to specific cancers or cancer clusters on a smaller scale. The objectives are achieved through collaborative international epidemiological studies using a multidisciplinary approach when possible, or through the initiation of individual analytical epidemiological studies. A second approach used is the coordination of international consortia of epidemiological studies.

Present plans

At present, the Section of Environment and Radiation (ENV) coordinates several large-scale projects on environmental, occupational, and radiation-related causes of cancer, with both empirical epidemiological and genetic epidemiological methods. The focus lies either on certain cancers, such as brain, testicular, oesophageal, breast, and childhood cancers, or on exposures, such as pesticides, asbestos, workplace chemicals, medical radiation, radiation from nuclear accidents, or electromagnetic fields, or the combination of both, such as occupational chemicals and lung cancer.

Future directions

Some of the research activities on cancer etiology recently initiated by the Section are long-term projects that will have their major scientific impact in the future. An example is the prolonged follow-up of large cohort studies, which become more informative with regard to cancer risk with longer latency periods, or the coordination of large-scale international consortia, to which

further studies will be added, increasing the statistical power to detect small risks for rare cancers.

In addition, the Section is expanding cancer etiology research to new, under-researched areas: first, a number of new studies are planned in sub-Saharan Africa to study the impact of increasing exposure levels of several potential occupational and environmental risk factors on cancer patterns in LMICs; second, there is a need to better characterize some environment-related cancer risks at low but more common exposure levels, as for example with ionizing radiation; third, ENV will expand research into some relatively common cancers where there is little knowledge of their etiology and where a substantial proportion may be attributable to environmental factors. As an overarching future direction, there is a need to improve exposure assessment and epidemiological study designs in under-researched areas where there is lack of data from disease and population registries.

Resources 2014–2015

Regular budget:	allocation	€ 2 154 116
	approved posts	7.99 (2014) / 8.29 (2015)
Extra-budgetary resources:	allocation	€ 312 500
	approved posts	0.70 (2014)

Area 4 Mechanisms of Carcinogenesis

Cancers are the consequence of combined genetic and epigenetic changes induced by environmental and lifestyle factors that trigger inappropriate activation or inactivation of specific genes, leading to neoplastic transformation. Although there is a consensus that exposures to environmental and lifestyle factors account for more than 90% of cancers, and therefore that the majority of cancers are potentially avoidable, there is a paucity of evidence regarding the critical molecular events that occur in the early stages of cancer development or in precursor lesions as well as the environmental factors and endogenous cues that trigger these changes.

The Section of Mechanisms of Carcinogenesis (MCA) aims to contribute to cancer prevention and control through a better understanding of mechanisms of carcinogenesis. The MCA Section focuses on investigating interactions between the environment, the genome, and the epigenome through mechanistic studies and genomic/epigenomic profiling as well as through translational studies (biomarker discovery and validation) in collaboration with epidemiology Groups.

The Section of Molecular Pathology (MPA) studies the molecular basis of human tumours, in particular brain tumours, through combined epidemiological and genetic studies. The MPA Section's expertise in molecular cancer pathology is essential to successfully leading the WHO Blue Books series (see sub-area 7.4).

4.1 Molecular carcinogenesis

Objectives

The overarching objective is to gain a better understanding of how genetic alterations (somatic mutations and epigenetic changes) resulting from environmental and lifestyle exposures alter critical cellular processes and promote cancer development. In addition, we contribute to translational research aimed at identifying biomarkers for early detection and prognosis of common cancers in LMICs.

Major emphasis is placed on discerning events that precede or drive tumour initiation and progression, as opposed to genetic changes that are non-causal or non-functional. Innovative research, and development of genomic methodologies and databases applicable to biobanks associated with population-based studies, will be applied to develop genomic and molecular biomarkers associated with cancer risk exposures.

Present plans

Present plans focus on using the latest next-generation DNA sequencing technologies and high-throughput profiling techniques to define the spectra of “driver” and “passenger” mutations involving oncogenes and tumour suppressor genes, and somatic or germline variants affecting other pathways, to elucidate their contribution to the cancer burden. Through collaborations in-house and with international partners, the Molecular Mechanisms and Biomarkers Group (MMB) will investigate the molecular mechanisms underlying upper urinary tract, bladder, and breast cancers in different populations worldwide. Genetic and epigenetic biomarkers of exposure and early carcinogenesis (including microRNAs and circulating free plasma DNA) will be identified and validated, in prospective population-based cohorts or in biobanked specimens, to be used as tools for early detection and prevention of cancer in LMICs. Current efforts focusing on maintaining an open-access comprehensive database of *TP53* mutations will continue to provide a tool for disseminating and integrating knowledge on this complex tumour suppressor gene.

Future directions

MMB will take the lead in mechanistic studies informed by high-throughput molecular profiling efforts, including massively parallel sequencing and expression profiling by arrays. These will be conducted in both in vitro and in vivo model systems and are expected to elucidate molecular events leading to the disruption of homeostatic programmes in carcinogenesis, and to provide candidate biomarkers for use in early detection and risk assessment of tumour formation. Links will be sought between critical molecular (genetic and epigenetic) alterations in human tumours and exposure to established and suspected environmental risk factors. The present high-throughput molecular profiling studies performed in breast, upper urinary tract, and bladder cancers will be expanded to other cancer types, to cover areas of high incidence in LMICs.

Resources 2014–2015

Regular budget:	allocation	€ 1 139 614
	approved posts	5
Extra-budgetary resources:	allocation	-
	approved posts	-

4.2 Epigenetics

Objectives

Epigenetic changes are emerging as key mechanisms in cancer development and progression. Consequently, understanding epigenetic events in cancer and their environmental and lifestyle determinants is fundamental to the successful prevention and treatment of cancer.

The broad long-term goal of this research is to advance the understanding of epigenetic changes in human cancer and to provide critical information for the development of novel epigenetics-based strategies for cancer prevention.

Present plans

Technological advances in epigenomics and the availability at IARC of unique case–control studies and population-based cohorts will be used by the Epigenetics Group (EGE) to understand the role of epigenetic mechanisms in specific human cancers and to discover new epigenetic biomarkers. Current studies are focused on: (i) epigenomic profiling (DNA methylome, microRNAs) of specific human cancers (including breast cancer, in collaboration with the NME Section, and lung cancer, in collaboration with the GEN Section) and identification of environmental/lifestyle factors (HBV infection, alcohol consumption, folate intake, obesity, smoking, etc.) associated with these changes; (ii) identification of epigenetic “driver” events and other critical molecular events in cancer cells (in collaboration with MMB, ICB, and GCS); and (iii) investigation of epigenetic mechanisms by which specific exposures (including early-life events) contribute to cancer development (childhood malignancies).

Future directions

Our future studies will focus on: (i) identifying alterations in the epigenome that precede and promote tumour development, and differentiating functionally important “driver” changes from non-functional “passenger” events; (ii) examining whether an environmental exposure during early embryonic life imprints an epigenetic signature that can be used as a biomarker of exposure and susceptibility to cancer in childhood and later life; (iii) testing the hypothesis that somatic “epigenetic mosaicism” is common in human tissues and that this phenomenon is a major modulator of cancer risk; and (iv) investigating whether epigenetic changes in surrogate tissues (such as peripheral blood and circulating nucleic acids) can be used as intermediate biomarkers for cancer risk and different health outcomes.

Resources 2014–2015

Regular budget:	allocation	€ 1 189 016
	approved posts	5
Extra-budgetary resources:	allocation	€ 495 062
	approved posts	-

4.3 Molecular pathology

Objectives

The nature and timing of genetic and epigenetic alterations during carcinogenesis appear to be both tissue- and cell-type-specific and may be reflected in histologically recognized phenotypes. The objectives of this sub-area are to elucidate the molecular basis and genetic pathways of human tumours, to identify clues as to their etiology, to correlate histologically recognized phenotypes with genotypes, and to identify reliable molecular markers for tumour classification and tumour progression. The ultimate goal is to establish molecular classifications that are more reliable than histological diagnosis alone.

Present plans

Tumour samples will be collected by the Section of Molecular Pathology (MPA) at the population level from different countries. Histopathology will be correlated with genetic/ epigenetic/ expression profiles of brain tumours, in order to provide useful information that will be essential for the future molecular classification. Genetic analyses will be carried out increasingly using next-generation sequencing, exome sequencing, and RNA sequencing, to identify novel “driver” mutations that may lead to more reliable diagnosis and better prediction of prognosis in brain tumours.

Future directions

In order to identify etiological factors involved in the development of brain tumours, exome sequencing on blood and tumour specimens from patients from families with unusual clustering of brain tumours will be performed. This may lead to the identification of new germline mutations or specific mutation patterns suggestive of etiological factors (e.g. chemical exposure). RNA sequencing will be performed for selected histological types of brain tumours to identify whether virus infection is associated with their development.

Resources 2014–2015

Regular budget:	allocation	€ 641 845
	approved posts	2.20
Extra-budgetary resources:	allocation	-
	approved posts	-

Area 5 Cancer Prevention

Cancer prevention is the most cost-effective method to significantly reduce the number of new cancer cases and deaths where the causes and risk factors of a given cancer are known. Cancer prevention approaches include reducing exposure by creating awareness through education, reducing the prevalence of environmental causal factors by methods including legislation, supplementing cancer preventing agents, vaccination, and early detection and treatment of precursor lesions. The Section of Early Detection and Prevention (EDP) continues to significantly contribute to cancer prevention globally by catalysing the identification of human carcinogens and through the evaluation of hepatitis B virus (HBV) and human papillomavirus (HPV)

vaccination, *Helicobacter pylori* (*H. pylori*) eradication, and simple and affordable screening methods, in particular for cervical, breast, and oral cancer. In addition, significant efforts are being made to introduce and strengthen quality assurance in the context of national cancer screening programmes, particularly in Europe.

5.1 Primary prevention

Objectives

The objective is to conduct research on the efficacy, safety, feasibility, and potential impact of primary preventive interventions, particularly against infection-associated cancers, which comprise at least 16% of cancers worldwide (23% in developing and 7% in developed countries).

Present plans

The efficacy of vaccines against HPVs to prevent cervical, anal, oral, and other genital cancers, and HBV vaccination to prevent liver cancer, will be evaluated, as will *H. pylori* treatment to prevent gastric cancer.

Two large efforts by EDP are under way to evaluate HPV vaccines: (i) a randomized trial in India involving approximately 18 000 adolescent women (12–18 years old) to evaluate the potential impact of reduced vaccination schedules with the quadrivalent HPV vaccine (HPV 6, 11, 16, and 18); (ii) a randomized double-blind controlled trial in Guanacaste, Costa Rica, in collaboration with the United States National Cancer Institute, investigating the safety, immunogenicity, and efficacy of the bivalent HPV vaccine (HPV 16, 18) for prevention of cervical, anal, and oral HPV infections and associated lesions in 7500 women.

An additional randomized trial in The Gambia involving more than 125 000 children is evaluating the long-term effect of HBV vaccination to prevent hepatocellular carcinoma. The Gambia Hepatitis Intervention Study (GHIS) children were recruited and vaccinated between 1986 and 1990, and the cohort is being followed through the Gambian National Cancer Registry.

A multicentre randomized trial in seven study centres in Latin America is being conducted in collaboration with the Southwest Oncology Group (SWOG), comparing eradication rates of different *H. pylori* treatment schedules, to identify a simple schedule that could facilitate large-scale eradication in high-risk populations to prevent gastric cancer.

Finally, in collaboration with a group of European experts, the 2003 European Code Against Cancer is being updated to provide guidance to the public on primary and secondary prevention of cancer.

Future directions

Long-term follow-up of the HPV-vaccinated cohorts in India and Guanacaste will provide information of the magnitude and duration of the efficacy of less than three doses of the two available HPV vaccines against cervical HPV infections and lesions. This is expected to have important implications for the implementation of vaccination programmes, particularly in developing countries. The studies will also permit evaluation of long-term efficacy and

immunogenicity of the vaccines in different age groups and populations as well as of the impact on health services and the potential modifications of virological patterns in vaccinated populations. In addition, important studies of the natural history of anal and oral HPV infections are planned within the Guanacaste trial.

The GHIS is expected to provide valuable definitive data on the benefit of HBV vaccination in preventing liver cancer, one of the leading cancers in Africa.

Several multicentre studies, including clinical trials of *H. pylori* eradication, are being planned to clearly define the worldwide molecular epidemiology of gastric cancer and its precursors and the role of *H. pylori* eradication in reduction of gastric cancer and other beneficial and potentially deleterious outcomes. Within these studies, particular attention will be given to the evaluation of potential biomarkers of high-risk individuals, to select groups for treatment.

The ample dissemination of the revised European Code Against Cancer, to be available in 2014, is expected to contribute to reduce the future cancer burden in Europe.

Resources 2014–2015

Regular budget:	allocation	€ 1 260 483
	approved posts	4.00 (2014) / 3.43 (2015)
Extra-budgetary resources:	allocation	€ 2 108 636
	approved posts	6.40 (2014) / 5.00 (2015)

5.2 Screening

Objectives

The objectives are to catalyse and accelerate the introduction of affordable and effective screening interventions and improve the performance of existing screening programmes globally, with particular emphasis on LMICs.

Present plans

The currently evaluated screening and treatment studies include:

- The long-term impact (> 10 years) of a single lifetime screening with HPV testing, or cytology, or visual inspection with acetic acid (VIA), in reducing cervical cancer mortality;
- The role of cytology and VIA in triaging HPV-positive women;
- The comparative accuracy of HPV testing, cytology, and VIA in detecting high-grade cervical precancerous lesions in HIV-infected women;
- The safety and efficacy of cold coagulation in the treatment of high-grade cervical precancerous lesions;
- The effectiveness of clinical breast examination screening and breast awareness in reducing breast cancer mortality in India;
- The performance characteristics of alternative imaging using near-infrared illumination and electronic palpation imaging in the early detection of breast cancer;

- Integration and scaling up of immunochemical faecal occult blood test (iFOBT)-based colorectal rectal cancer screening in routine health services in Thailand;
- Roll-out and scaling up of oral cancer screening in routine health services in Kerala, India, and in Sri Lanka.

EDP is providing guidance to improve the quality assurance in population-based breast, cervical, and colorectal cancer screening programmes in Europe through development and adoption of quality assurance guidelines.

A number of outcomes will be evaluated, such as accuracy, feasibility, acceptability, safety, natural history of disease, stage distribution, survival, incidence and mortality reduction, cost-effectiveness, and psychosocial, economic, and health-services-related determinants of participation in programmes.

Future directions

IARC should provide leadership in contributing to the development of resource-appropriate screening programmes globally. This includes, among others: assessment of different triage approaches following primary HPV screening; psychosocial impact of HPV screening; breast awareness and early clinical diagnosis as an alternative strategy for breast cancer control in low-income countries; evaluation of integration of proven screening methods of early detection and prevention for breast, cervical, colorectal, and oral cancers in routine health services; evaluation of various determinants of adherence and non-compliance in screening programmes in different LMIC settings; descriptive evaluation of ongoing national screening and early diagnosis programmes; and piloting the integrated delivery of HPV screening and vaccination in selected countries.

Resources 2014–2015

Regular budget:	allocation	€ 1 119 889
	approved posts	4.40 (2014) / 3.87 (2015)
Extra-budgetary resources:	allocation	€ 400 031
	approved posts	0.70 (2014)

Area 6 Education and Training

Education and training in cancer research has been one of the statutory functions of the Agency since its inception in 1966, complementing and supporting IARC's research activities. Fostering knowledge on key developments in cancer research and developing epidemiological and laboratory research skills contribute to forming a new generation of cancer researchers with the motivation and skills to tackle the rising global cancer burden. Priority is given to scientists from, or with a research interest relevant to, countries where resources for the control of chronic diseases in general, and cancer in particular, are limited.

One of the successes of IARC in the context of education and training has been its role in actively building and maintaining relationships with diverse and numerous key players in the field of cancer research, including past fellows, course attendees, and course faculty. In this way

the activity has helped to create subsequent opportunities for conducting high-quality research worldwide, as well as providing an important mechanism for recruiting scientists to cancer research.

The programme in this area is currently organized in two major components, fellowships and training courses, coordinated by the Education and Training Group (ETR).

6.1 IARC Research Training and Fellowship Programme

In total IARC has awarded 580 fellowships to junior scientists from 78 countries for training in cancer research. More than 80% of fellows return to their home country on completion of their training and remain active in cancer research. As a result, IARC Fellowships have made a substantial contribution to the development of cancer research in many countries. The Agency also attracts top international cancer researchers, who visit and work at the Agency, contributing to its programmes and making it an ideal environment for education, training, and exchange.

Objectives

The main objective of the programme is to create and facilitate collaborative research links between IARC and cancer researchers worldwide, by providing opportunities for training to scientists who wish to pursue a career in cancer research, particularly those from, or with projects related to, LMICs.

Present plans

The Agency's Fellowship Programme consists of several components: Postdoctoral Fellowships (2-year fellowships at IARC), the Senior Visiting Scientist Award (at IARC), and Expertise Transfer Fellowships for senior scientists (at an institution in a LMIC).

A framework for hosting other trainees, students, postdocs, or visiting scientists funded by the IARC Groups has been developed and managed to ensure the quality of the host environment, including: administrative processes; the Postdoctoral Fellowship Charter, allowing a more structured approach to postdoctoral training at IARC; and a generic training programme, to equip postdoctoral researchers with essential skills to enhance their career prospects.

Future directions

Improvement of the host environment will be developed by further implementing the Postdoctoral Fellowship Charter and streamlining administrative processes. Extra-budgetary funds will be sought for the expansion of the programme, including the development of short-term fellowships and the establishment of bilateral agreements with organizations in Participating States to increase scientific exchange and collaboration through training.

Resources 2014–2015

Regular budget:	allocation	€ 1 060 538
	approved posts	1.50
Extra-budgetary resources:	allocation	€ 676 406
	approved posts	-

6.2 IARC Courses

The IARC Courses Programme is one of the continuing core activities of the Agency and consists of the IARC Summer School and a series of ad hoc courses led by either ETR or individual scientific Sections.

Objectives

The first aim of the IARC Courses Programme is to stimulate research on cancer, by improving scientific knowledge and developing the practical skills of researchers in areas of core scientific competences of IARC.

Developing local expertise in cancer epidemiology, particularly in LMICs, is an equally important objective of the IARC Courses Programme in order to enhance cancer surveillance, detection, and prevention.

Present plans

The Courses Programme ensures the delivery of a coordinated set of courses by the Agency, including through strategic partnerships with other organizations and effective engagement with the scientific Sections at IARC.

The IARC Summer School is held annually at IARC and consists of a series of training modules. Emphasis is placed on training in epidemiology, biostatistics, and cancer registration, with modules on descriptive, analytical, and molecular epidemiology. In addition, ad hoc courses are organized either at or outside IARC to respond to specific needs (e.g. courses held in languages other than English) or to support collaborations on specific IARC scientific activities. In particular, the Agency provides extensive training in cancer registration and cancer screening. The cancer registration training is coordinated with CIN in relation to the new IARC Regional Hubs for cancer registration.

Future directions

The current programme will be maintained, and extra-budgetary funds will be sought to expand and to provide financial support for attendance to suitable candidates from LMICs in the absence of local resources. In addition, more specific and advanced courses (e.g. Course on Statistical Practice in Epidemiology with R, or Implementation of Population-Based Cancer Screening Programmes) will be developed in collaboration with local and international institutions. Some of the modules will be reshaped to integrate an e-learning component.

In order to bring IARC learning and training resources closer to their target audiences, more specifically those from LMICs, the ETR web site will be redesigned, providing access to teaching and learning resources as well as opportunities for e-learning.

Resources 2014–2015

Regular budget:	allocation	€ 463 695
	approved posts	1.50
Extra-budgetary resources:	allocation	-
	approved posts	-

Area 7 Methodology and Research Tools

This area brings together activities that enable research by various Groups and Sections across the Agency. It includes the following sub-areas: biostatistics and bioinformatics, exposure assessment, biomarkers, and the WHO Classification of Tumours. The cross-Agency application of this work is also reflected in the distribution of the research activity across several Sections and Groups.

7.1 Biostatistics and bioinformatics

Objectives

There are three objectives within this sub-area:

- Providing bioinformatics support for the Agency's high-throughput molecular genetics tools, in particular the next-generation sequencing facility;
- Implementation and development of appropriate statistical methods for the analysis of molecular genetic data, generated internally or from external sources;
- Support of a professional environment for statisticians, to encourage appropriate analysis and interpretation of data.

Present plans

The high-performance computing cluster within the Genetic Cancer Susceptibility Group (GCS) will be maintained, while developing analysis pipelines to streamline the analysis of molecular genetic data. This will involve collaboration between GCS, the Biostatistics Group (BST), and Information Technology Services (ITS), as well as with external collaborators with expertise in this area, notably with the Synergie platform at the Centre Léon Bérard in Lyon.

New and already available statistical methods will be evaluated for their suitability for the analysis tasks at IARC. Where no existing tools are adequate, or where substantial improvements are possible, appropriate methods will be developed internally.

The training programme in statistical skills will be continued through the IARC Summer School and other courses; distinguished statisticians will be invited for short stays, and communication will be encouraged between statisticians working in different Groups.

Future directions

We plan to track changes in genetic sequencing techniques in order to maintain appropriate analytical support; and to promote a culture of statistical rigour among postdoctoral fellows.

Resources 2014–2015

Regular budget:	allocation	€ 783 568
	approved posts	2.87
Extra-budgetary resources:	allocation	-
	approved posts	-

7.2 Exposure assessment

Objectives

Diet is considered an important environmental factor in the etiology of several cancers. However, studies relating to diet and cancer remain inconsistent, possibly due to errors in exposure measurement. The Dietary Exposure Assessment Group (DEX) aims to develop and disseminate improved dietary assessment methodologies (e.g. EPIC-SOFT®) through a dedicated web-support platform, the e-Standardized Methodologies Platform (e-SMP) hosted at IARC, and distance e-training facilities. Implementation of these tools for projects in LMICs is also an important goal.

Similar difficulties exist in relation to exposure assessment methodologies for other environmental factors, notably for chemicals (estimation via job-exposure matrices) and for ionizing and non-ionizing radiation. Methods for accounting for these uncertainties in exposure assessment, particularly in the context of environmental and occupational epidemiological studies, are under development by the Section of Environment and Radiation (ENV).

Present plans

The DEX Group is recognized as a reference for the development of dietary assessment methodology and the support web-infrastructure required for its application. It has formal collaborations with WHO, FAO, EFSA, and EU Member States. Current projects include:

- The standardized interview-based computerized 24-hour dietary recall tool, EPIC-SOFT®;
- A computerized data entry system compatible with EPIC-SOFT® and coupled with dietary records to assess the diet of children;
- The database management system EnMan to compile and document multiple food composition databases developed by IARC;
- The e-Standardized Methodologies Platform (e-SMP) hosted at IARC to support dissemination and long-term maintenance of the DEX international dietary methodologies (still under development).

The ENV Section is currently involved in multiple projects relating to mobile phones, ionizing radiation, and chemical exposures. The improvement of exposure assessment models is an activity that cuts across the other projects of the Section. Approaches currently being explored include:

- Development of job-exposure matrices based on measurement surveys;
- Improvement of the assessment of exposure to low-dose ionizing radiation;
- Modelling of exposure to non-ionizing radiation;
- Assessment of environmental exposures through prediction models.

Future directions

A long-term goal of this research is to enable the Agency to play a major role in the provision of common dietary methodologies globally, in order to increase the accuracy and comparability of

dietary exposure. This would offer multiple benefits for nutritional research, monitoring, and diet-related non-communicable disease research and prevention.

The stepwise improvement of the accuracy of exposure assessment in large-scale epidemiological studies of environmental and occupational risk factors is a long-term goal of the ENV Section. Particularly promising fields are the development of prediction models (i.e. predicting an individual's exposure from more easily available or accessible data), simulations, identification of exposure-related biomarkers, and improving the use of self-reported data through validation studies.

Resources 2014–2015

Regular budget:	allocation	€ 944 861
	approved posts	3.85 (2014) / 3.90 (2015)
Extra-budgetary resources:	allocation	€ 69 786
	approved posts	-

7.3 Biomarkers

Objectives

The concept of the exposome, the totality of environmental exposures faced by an individual, offers a basis to re-examine the role of environmental and lifestyle factors in cancer etiology. Metabolomics offers a more global characterization of the exposome and the possibility of identifying new biomarkers of exposure. The objective of the Biomarkers Group (BMA) is to discover, validate, and implement biomarkers of nutritional, environmental, and metabolic exposure for cancer epidemiology using the most advanced analytical technologies and metabolomics approaches.

Present plans

The mass spectrometry platform recently established at IARC is set up to analyse and compare metabolic profiles in urine and plasma samples. Novel databases will facilitate the identification of biomarkers in complex metabolic profiles. These methods are implemented in cohort and intervention studies to identify novel biomarkers for dietary intake and environmental exposure.

Targeted analytical methods using chromatographic and mass spectrometry techniques or immunoassays are developed to measure specific fractions of the exposome (hormones, endocrine disruptors, fatty acids, and polyphenols). They are implemented in large-scale cohort studies from both high-income countries (EPIC) and LMICs (EsMaestras, CAMA, PreCAMA) to study the associations of these fractions of the exposome with cancer risk (and intermediate end-points) as well as to identify the main determinants of their concentrations.

Future directions

The long-term goal of this research is to take best advantage of collected biospecimens to identify biomarkers of exposure and intermediate markers of cancer, and to develop exposome-wide association studies to gain further knowledge on the etiology of cancers.

Resources 2014–2015

Regular budget:	allocation	€ 1 219 054
	approved posts	5.40
Extra-budgetary resources:	allocation	€ 358 594
	approved posts	-

7.4 WHO Classification of Tumours

Objectives

The objectives of this project are to establish a pathological and genetic classification and grading of human tumours that is accepted and used worldwide, and to publish the 4th edition of the WHO Blue Books series. Without clearly defined histopathological and genetic diagnostic criteria, epidemiological and clinical studies are difficult to conduct.

Present plans

In 2014–2015, the following volumes of the 4th edition are planned: *Tumours of Female Reproductive Organs; Tumours of the Lung, Pleura, Thymus and Heart; Eye Tumours; Tumours of Male Genital Organs; Tumours of Endocrine Organs; Skin Tumours; and Head and Neck Tumours*. Online versions of the WHO Classification of Tumours series are planned using the IARC web site PubCan, which will also be used for updating previously published volumes of the 4th edition.

Future directions

An acceleration of the publication process is envisaged in order to complete the 4th edition (total, 12 volumes) by 2017. Eventually, the histopathological classification will be replaced by molecular classification for selected disease entities.

Resources 2014–2015

Regular budget:	allocation	€ 200 150
	approved posts	0.70
Extra-budgetary resources:	allocation	€ 1 330 781
	approved posts	4.00

Area 8 Scientific Support

This area comprises shared support services across the Agency managed as central facilities by various Groups. These include the Laboratory Services and Biobank Group (LSB), communications and knowledge management under the Communications Group (COM), and facilitation and management of premises for the scientific activities from the Section of Support to Research (SSR).

The continued strengthening of the activities within Area 8 reflects the strategic consolidation of management of IARC's research assets and recognizes the importance for IARC of communicating the scientific advances it is making to a wider community.

- In the laboratory services, additional funds are provided in order to consolidate maintenance costs of equipment across the Agency, and the team staff structure is strengthened towards more substantive capacity. During the biennium further investments will be made to maintain state-of-the-art facilities, including mass spectrometry and next-generation sequencing.
- For the biobank, the cataloguing of samples present in the Agency will continue, and modernization and centralization of management of the samples, including increased access for external collaborators, will be developed.
- The new IARC communication strategy drives a strengthened structure within COM with defined projects aimed at increasing the Agency's visibility and improving the dissemination of its research.

In recognition of the actual costs of the Agency's scientific work, Area 8 includes a new sub-area 8.4: "Research facilitation".

8.1 Laboratory services

Objectives

The main goals of the Laboratory Services are to:

- Manage the basic and specialized laboratory services supporting research;
- Coordinate equipment acquisition and maintenance programmes;
- Supervise laboratory safety and safe practice at work;
- Provide technical advice to the IARC Occupational Health and Safety Committee;
- Provide access to the specialized services and techniques such as genetics, pathology, and Biosafety Level 3 laboratory.

The Genetic Services Platform (GSP) maintains and develops genomics-based techniques as well as related equipment and Laboratory Information Management System (LIMS) support.

Present plans

Basic services – In collaboration with the IARC Laboratory Steering Committee and Group/Section Heads: prioritization of new equipment; replacement of obsolete equipment; optimization of operational procedures to ensure maximum cost recovery in service provision; introduction and monitoring of good laboratory practice tools such as the electronic laboratory notebook (ELN); development of an internal web site that will serve as a central resource to provide information on facilities and equipment available at IARC, laboratory protocols, and how to access the specialized facilities and equipment, including information on operational costs related to their usage.

Specialized services – Maintenance, development, and service provision of the genomics techniques and related equipment, LIMS support, the Biosafety Level 3 facilities, and the

histology laboratory; coordination of collaborative efforts with IARC Groups and external partners based on the technologies available at IARC, and exploration of mutual exchanges with external partners aimed at expanding the research facilities for IARC scientists.

Future directions

LSB will work in close collaboration with Section/Group Heads and with SSR to develop the new laboratory facilities for IARC, and with the ITS Group more specifically to prioritize investments in high-performance cloud computing to accommodate the bioinformatics data from DNA sequencing and metabonomics. LSB will maintain consultation with IARC Groups and the Laboratory Steering Committee regarding IARC's particular needs in specialized areas, and consult with external service providers for access to state-of-the-art techniques, as appropriate.

Resources 2014–2015

Regular budget:	allocation	€ 1 668 193
	approved posts	8.75 (2014) / 8.65 (2015)
Extra-budgetary resources:	allocation	-
	approved posts	-

8.2 Biobank

Objectives

The IARC Biobank provides an important resource for studying the complex relationship between risk factors and cancer and for biomarker discovery. The biological sample collections at IARC are derived mainly from population- and disease-based studies, conducted worldwide. These amount to more than 7 million biosamples; about 4 million from 370 000 participants in the European Prospective Investigation into Cancer and Nutrition (EPIC), and the remainder from collaborative studies involving IARC scientists. The biobank's main goals are to:

- Maintain and manage a centralized IARC Biobank in a safe and secure environment using state-of-the-art tools;
- Provide a reliable, high-quality pre-analytical sample processing service for sample retrieval, DNA extraction, and shipment according to international guidelines and protocols;
- Participate in international projects and initiatives.

Present plans

The management of the resources is undergoing a restructuring process with the centralization of the sample collections, using a common database to manage biosamples and related data, aimed at improving quality, safety, and traceability. Centralization will provide the opportunity for standardization and harmonization between studies and sample collections and will facilitate the sharing of resources between IARC colleagues and with external collaborators through a well-defined access process.

Future directions

Future plans include provision of a complete catalogue of samples stored at IARC on the biobank web site, to encourage international collaboration and new research opportunities; and providing leadership and coordination of a biobank network for LMICs in collaboration with other international organizations with biobanking facilities.

Resources 2014–2015

Regular budget:	allocation	€ 764 787
	approved posts	4.25 (2014) / 4.35 (2015)
Extra-budgetary resources:	allocation	€ 522 079
	approved posts	3.80 (2014) / 4.00 (2015)

8.3 Communication

Knowledge Management Centre (KMC)

Objectives

The Knowledge Management Centre (KMC) integrates services and resources that support the creation, preservation, and dissemination of IARC research and knowledge. While supporting the work of the Agency by providing seamless access to global information, KMC will also coordinate the technical expertise and services for the production, promotion, and dissemination of a range of high-quality IARC publications.

Present plans and future directions

The Library will acquire current and new subscriptions in digital editions only; the purchase of digital archives will not be considered. Core print journals in the collection will be identified, archived, and preserved to ensure accessibility. Print journal back volumes that are identified as being digitized and preserved in PubMed Central (or equivalent) will be withdrawn. The Library will continue to collaborate with WHO/HQ and WHO Regional Office Libraries to ensure continued access to GIFT (Global Information Full Text) electronic resources, which supplement the Agency's core information resources. An outcome of the rationalization of the print collection will be to alleviate Library space constraints. The transformation of the Library reading room into a welcoming, user-friendly environment for individual study, learning, and research will be investigated.

The integrated library system (ILS) that underpins the Library catalogue and technical services applications, SydneyPlus, will be hosted at the provider's site to ensure adequate IT support for implementing its full functionality.

Open-access publishing of Agency research outputs will be promoted through education, advocacy, and policy development by the Library. Current and retrospective archiving of the Agency's publications will populate the knowledgebase, which will both promote open access and preserve the institutional memory of the Agency.

Publications Services will manage the Publications Programme of the Agency from within the KMC. Publications Services will coordinate the timely production, translation, promotion, and

distribution of high-quality publications. Guidance will be provided to other Groups in their publications projects. Appropriate technologies will be adopted to streamline the publication process. Policies will be developed and implemented to ensure the appropriate use of third-party content in all IARC publications and web sites. In collaboration with the IARC Advisory Committee on Publications, potential publications and publishing partners will be explored. The feasibility of digital editions of new and existing publications will be investigated. Agreements with WHO Press for the promotion and dissemination of IARC publications will be revisited to explore alternative revenue streams and revenue sharing.

Communications

Objectives

A major aim of the Communications Group (COM) is to promote the work of the Agency through its media presence, to enhance visibility and to ensure wide dissemination of Agency research and information. The development and promotion of relations with key stakeholders and collaborators is important. Coordination and management of the web presence of the Agency is a key objective, in addition to the provision of editing and translation services to ensure availability of IARC official documents, publications, and web content of high quality.

Present plans and future directions

The Press Office will ensure that major IARC scientific advances will be disseminated to its different stakeholders using a range of media channels, communications technologies, and applications. Content creation for dissemination via the Agency's web site will be coordinated with the Web Services. The addition of a professional Press Officer to the COM team will allow a dedicated effort to widen the reach of IARC communications.

Web Services ensure the coherent and dynamic presence of the Agency on the Internet. The IARC institutional web site will continue to be the primary means for the dissemination of research results and the key point of access for target audiences. Alignment of sites and implementation of a Content Management System (CMS) will contribute to increased visibility of Agency sub-sites and databases such as the *IARC Monographs* and the cancer incidence and mortality databases. Content creation and distribution in relevant media channels will be coordinated with the Press Officer. Development of policies and guidelines for dissemination of information via the web site will be done within the framework of the Agency's communications strategy.

Web Services will assist in analysing the needs of the IARC research Sections and Groups. Technical support and training for Section/Group focal points will be provided to ensure that the development and maintenance of sub-sites conform to IARC's corporate identity guidelines.

Editing and Translation Services provide support to the governing bodies and staff of the Agency in the form of easily accessible, readable, high-quality information and official documentation in the official languages of the Agency, and ensure the uniformity of content disseminated by IARC in accordance with the standards required for UN/WHO publications and/or relevant editorial style sources.

Resources 2014–2015

Regular budget:	allocation	€ 2 124 582
	approved posts	8.25
Extra-budgetary resources:	allocation	€ 119 079
	approved posts	1.00

8.4 Research facilitation

Objectives

- Maintain suitable and sufficient premises and infrastructure for IARC's scientific activities;
- Ensure that IARC scientific staff and premises abide by the Minimum Operating Security Standards as set by UN Department of Safety and Security.

Present plans

In efforts to present the actual costs of the respective sections of the IARC Regular Budget, this sub-area of the budget represents the share of running costs of the Research Groups previously budgeted under Appropriation Section 3 Administrative Programme. Of these costs, 94% are made up of general operating expenses such as utilities, security services, and cleaning contracts, with the balance budgeted for recurring building and laboratory maintenance costs. Section 4 of this document provides further information and justification for this move of cost attribution.

Several efforts are ongoing towards increased cost-effectiveness and efficiency, including renewing all contracts for services.

Future plans

Recognizing that many of the running costs are associated with the ageing current premises and its inherent cost inefficiencies, efforts to further economize where possible will continue. Substantial opportunities to reduce this budgetary burden exist in proper planning and design of the "Nouveau Centre".

Resources 2014–2015

Regular budget:	allocation	€ 1 799 000
	approved posts	-
Extra-budgetary resources:	allocation	-
	approved posts	-

Area 9 Research Leadership and Management

By virtue of its status and mandate as an international research organization and a part of the UN/WHO family, the Agency is in a unique position within the scientific community to provide leadership in setting a research agenda that supports the development of policies and initiatives for cancer control in less developed regions.

The Agency's strategy follows the framework set out by its Statute, but is also informed by and reflects the priorities set out by WHO, by IARC's governance structures which discuss and approve the Medium-Term Strategy and the Programme Budget, and by its network of partners and collaborators.

9.1 Direction and leadership

The Director is responsible for defining the vision and setting the strategy that provide the overall framework for the fulfilment of the Agency's objectives. He is supported and advised on a number of levels. First, by the Senior Leadership Team (SLT), which meets on a monthly basis and is made up of Section Heads, the Director of Administration and Finance (DAF), and the Head of the Communications Group (COM). Second, by advisory groups that provide cross-Agency input into decision-making in defined areas, including the Laboratory Steering Committee, the Biobank Steering Committee, the Advisory Committee on Education and Training, and the Advisory Committee on Publications. Third, the Director and DAF maintain regular dialogue with the Staff Association Committee in order to continue to improve the working environment at IARC.

The DAF and the Heads of the Support Services within the Section of Support to Research (SSR) meet regularly to implement decisions after discussion at the SLT meetings and in other forums.

Objectives

The overall objectives of the direction and leadership area are:

- To direct, inspire, and lead IARC in order to maximize the contributions of all staff and external collaborators towards attainment of the mission of the Agency;
- To develop a value-based ethos of courtesy, honesty, and generosity to underpin the activities of the Agency;
- To create a working environment in which all staff of the Agency can flourish and contribute at high levels of performance to its aims and objectives;
- To continue to extend the Agency's networks of scientific collaborations with external groups and institutions;
- To strengthen IARC's research collaboration with intergovernmental and government bodies and other interested parties;
- To achieve further expansion of the Agency's scientific programme by attracting new Participating States and voluntary contributions;
- To establish and maintain good relations with IARC's main funding partners, e.g. the European Commission, the United States National Institutes of Health, the Institut National du Cancer (INCa) and other funding organizations in the host country, as well as other local, national, and international organizations or institutes.

Present plans and future directions

The Agency is facing major opportunities and demands, driven both by the increasing burden of cancer globally (particularly its rise in LMICs) and by the increased political focus on cancer as a part of the broader non-communicable disease agenda. At the same time there are resource constraints on the Agency's activities, due to the understandable pressures on its regular budget.

In response to these opportunities and constraints the IARC leadership will seek to mobilize the necessary resources in three ways: (i) new Participating States, with an associated aim to gain a wider geographic representation; (ii) increased voluntary contributions from competitive grant applications; and (iii) increased voluntary contributions through direct agreements with donors, existing Participating States, and other sponsors on defined areas in line with the Medium-Term Strategy and Implementation Plan.

IARC will seek to expand its strategic partnerships with regional organizations and international research forums. This will permit the research agenda to be developed in the light of regional priorities. The Agency will also work with key national partners to achieve its objectives, drawing on the excellent collaborations established through joint research projects over many years. The close working relationship with WHO/HQ and links to WHO Regional Offices will be further developed.

Finally, the Agency occupies ageing and therefore costly buildings. The IARC leadership will work with local and national partners and the Governing Council to develop plans for a new building (the "Nouveau Centre" project) to ensure that the Agency can fulfil its mandate and prepare for the opportunities and challenges that will be presented in the coming decades.

Resources 2014–2015

Regular budget:	allocation	€ 1 038 821
	approved posts	1.50
Extra-budgetary resources:	allocation	-
	approved posts	-

9.2 Programme management and development

Section, Deputy Section, and Group Heads are responsible for the implementation of the research programmes in their areas, in accordance with the objectives set out in the Agency's Medium-Term Strategy, and for the operational management and administration of staff and projects under their responsibility.

Objectives

The overall objectives of programme management and development are:

- To provide scientific programme management at the operational level;
- To provide for the development and learning needs of staff in accordance with the requirements of the Agency's programme;

- To develop management processes that promote an organizational culture that encourages collaboration and creative thinking, and motivates staff;
- To introduce a comprehensive knowledge-based information system for project and programme management.

Present plans and future directions

Section, Deputy Section, and Group Heads are responsible for leading their research teams or support services, including the management of resources (human, financial, material). A key element of this role is career development of staff within the Sections and Groups through an enhanced Performance Management and Development System (PMDS) including a targeted learning component. IARC leadership provides guidance and support to this managerial aspect of the work in the Sections, ensuring equal treatment and opportunities across the Agency.

The management tools available to Sections to allow efficient use of human and other resources will continue to be adapted to ensure efficiency and informed decision-making (see Section 3).

The Director's Development Provision (DDP) provides the Director with the flexibility to respond to and support emerging research opportunities. The DDP will be used to facilitate new initiatives and to strengthen existing ones as these arise during the biennium. In addition, incentives are provided for Sections/Groups to develop successful projects funded through extra-budgetary sources, although such projects must be consistent with the Medium-Term Strategy.

Resources 2014–2015

Regular budget:	allocation	€ 1 549 841
	approved posts	2.50
Extra-budgetary resources:	allocation	-
	approved posts	-

9.3 Ethics

The primary objective of the IARC Ethics Committee (IEC) is to protect the rights and welfare of participants in studies carried out or sponsored by IARC. The Agency has a duty to show leadership in ensuring that these studies are beyond ethical reproach and transparently demonstrate the fundamental principles of doing no harm, respect, beneficence, and justice.

Objectives

More generally, the objectives of the IEC are:

- To ensure that IARC's activities continue to respect the highest ethical principles for research involving human participants;
- To show leadership in the consistent application of the highest ethical standards in research conducted in different regions of the world.

Present plans and future directions

The membership of the IEC comprises seven external members from diverse backgrounds, three IARC staff members, and one WHO staff member. An effort is made to ensure representation of members from LMICs.

The IEC will meet 4–5 times per year in Lyon and provide ethical evaluation of all new proposals for IARC research activities. It will ensure, to the extent possible, the international consistency and completeness of its ethical review decisions. Standard Operating Procedures (SOPs) and Rules and Procedures (RAPs) have been developed in compliance with international guidelines. For better traceability, a database of all proposals has been established and will be linked with the research projects database developed by the IARC Grants Office.

Resources 2014–2015

Regular budget:	allocation	€ 139 881
	approved posts	0.50
Extra-budgetary resources:	allocation	-
	approved posts	-

3. ADMINISTRATIVE PROGRAMME 2014–2015

Area 1 Administrative Management

Objectives

The Section of Support to Research (SSR) supports the achievement of IARC's scientific objectives through efficient and effective management of the Agency's resources and administrative service provision, ensuring accountable risk mitigation and implementing strategies to strengthen IARC's capacity.

The Section is made up of the specialized administrative units that provide services intrinsic to the successful implementation of the scientific programme. The Section ensures that the Agency's activities represent the highest standards of management, efficiency, and accountability in the use of the funding made available by its Participating States and donors.

SSR management provides overall leadership and guidance to the team as well as support to the Director in daily management of the Agency. SSR management provides operational and strategic advice to the scientific sections and maintains close links with relevant WHO units to ensure close coordination and alignment of administrative and legal policies.

Present plans

The Section agrees on two-year work plans with the Director after consultation with the Senior Leadership Team, based on three overarching principles:

- Delivery of efficient and effective support services to enable achievement of the scientific programme;
- Sound risk management of Agency activities and assets;
- Proactive support to meet new programmatic opportunities.

During the 2012–2013 biennium, alongside continued provision of administrative services, the business processes of the Agency are under complete review to build an accountable, transparent, and modern service for the Agency. The participatory process followed ensures close involvement of all teams within the initiative with outcomes that require investments of resources, specifically towards IT software requirements. Several business continuity measures are also being put in place, to manage short- and longer-term issues affecting the Agency. SSR is further managing the implementation of the International Public Sector Accounting Standards (IPSAS) in full effect from 2012.

Future directions

SSR will continue to achieve efficiencies in use of resources and programmatic effectiveness. The Section will work with the Director in enabling the Agency to take advantage of new opportunities, through support to an expanded financial portfolio and an organizational model that reflects future programmatic directions. The 2014–2015 biennium will likely feature the design stage for the "Nouveau Centre" project, throughout which SSR will lead the Agency's role in the project in close collaboration with the French authorities.

Resources 2014–2015

Regular budget:	allocation	€ 973 126
	approved posts	4
Extra-budgetary resources:	allocation	€ 20 000
	approved posts	-

Area 2 Human Resources Services

The full range of effective human resources services are provided so as to enable the Agency to attract and retain the best candidates in support of the achievement of the Agency's objectives.

Intrinsic to achieving the mandate of the Agency is a specialized, skilled, productive, and motivated workforce dedicated to the mission of cancer prevention. This requires identification of highly qualified candidates with the right skills and qualifications that match the particularities of IARC's needs and management of on-time recruiting and contract administration according to the applicable policies.

The Human Resources Office maintains close links with WHO in order to ensure the highest possible conditions of employment and proactive provision of advisory services to IARC staff and programmes, including to senior management.

By overseeing implementation of sound personnel management policies, including professional development and ensuring a working environment with equal treatment for all staff, the Human Resources Office contributes to Agency efforts to sustain an environment that promotes high levels of performance. A key element is the implementation of a new Performance Management and Development System (PMDS) for the Agency that will allow for increased support to staff and supervisors in achieving agreed results-based work plans. These efforts are complemented by oversight of the staff medical services and secretarial pools and are carried out in close consultation with the Staff Association Committee.

Priorities for 2014–2015 will be focused on enhancing the tools available to staff and management to meet results-based performance and learning targets.

Resources 2014–2015

Regular budget:	allocation	€ 972 946
	approved posts	5.1
Extra-budgetary resources:	allocation	€ 372 436
	approved posts	3

Area 3 Conference, Office, and Building Services

The administrative services provide effective infrastructure, procurement, logistical, and general administrative services, ensuring a continuous working environment for the staff and programmes of the Agency.

The services managed in this area include contracting and procurement, office and laboratory space management, building management, conference services, and records management. During the 2012–2013 biennium, work on modernizing and professionalizing each of these services is progressing steadily, specifically:

- Contracting and procurement: Review of all service contracts for renewal of bidding processes with the aim of setting up long-term agreements and increasing rosters of local and international suppliers for common procured items towards providing the best value for money. Strengthened asset and inventory management, including adoption of an automated barcode tracking system.
- Office and laboratory space management: Working with Section/Group Heads, the Laboratory Steering Committee, and the Staff Association Committee, manage available space, equipment, and office facilities to ensure an appropriate working environment to deliver IARC's scientific programme. Parameters required to appropriately manage this service are captured and monitored to allow proactive intervention as required.
- Building management: As described in document SC/49/11, the service has supported the Agency in managing the liaison with Ville de Lyon throughout all the planned renovation works. The administrative staff also face continuous ad hoc building infrastructure issues, for which they provide primary intervention in order to ensure continuity of building services until such time as they are able to organize more sustainable solutions. As a result, the service plays a key role in defining Agency risks to business continuity and defining and managing appropriate mitigation mechanisms accordingly. This service area also coordinates the technical inputs into the "Nouveau Centre" project and serves as the main liaison with the local counterparts accordingly.
- Conference services and records management: The administrative service coordinates conferences and meetings planning and organization (technical arrangements, hospitality requirements and catering, transportation, hotel bookings, and administrative arrangements). New guidelines are to be provided in order to offer the scientific units a more efficient service. A new electronic documentation system, linked to a shared documents system and workflows, is under study to promote collaborative work within IARC.

Priorities for 2014–2015 will focus on: (i) the administrative, legal, and technical aspects of the "Nouveau Centre" project in coordination with local authorities; and (ii) modernizing the building maintenance management systems in order to be more proactive and to be able to plan maintenance and repair works, to anticipate technical problems and offer a better day-to-day working environment.

Resources 2014–2015

Regular budget:	allocation	€ 3 615 568
	approved posts	16
Extra-budgetary resources:	allocation	€ 348 000
	approved posts	-

Area 4 Grants, Budget, and Finance Services

This service area provides widespread financial services, including providing support to the Agency's resource mobilization efforts, both on the grant application process and on direct contributions, budget management, cash management, travel management, payment processing, accounting, and donor/statutory/management reporting, as well as financial management and oversight. The objectives of this service area are:

- Contributing to the financial stability of the Agency through proactive searching for external funding opportunities, effective support during grant application/negotiation, and effective management of donor relations;
- Providing efficient support, ensuring effective use of financial resources and identifying cost saving opportunities;
- Maintaining high-quality service standards and compliance with financial rules and regulations through streamlined business processes.

The Agency integrated the IARC Grants Office into the Budget and Finance Office in 2012, bringing end-to-end financial services under one service area, particularly for smoother implementation of functions related to grant/donor agreement management, income recognition from grants, budget control services, and donor reporting.

The main priorities of the Agency in this area during 2012–2013 include smooth implementation of the International Public Sector Accounting Standards (IPSAS) and setting effective operational protocols, specifically:

- Reviewing and streamlining business processes as part of IPSAS implementation and the larger initiative of the SSR team, with a balance between internal control and efficiency. This includes, but is not limited to, the revenue recognition process; budget release process; travel process, including implementation of a new travel management system to replace the existing, obsolete system (TMAS); and grant application process. Related guidelines are updated, and all key processes are documented.
- Enhanced services to the scientific groups through a donor intelligence database, enhanced internal report format, and automatic reminder system for donor reporting schedule to ensure timely submission of donor reports.
- Effective management and oversight. New monitoring tools will be developed, i.e. financial dashboard, periodic report of service level standard, periodic financial status report, and exception reports.
- Expanding the functional scope of SAP for positions management, full automation of statutory reports, and grants management (subject to resources availability).
- Strengthening staff capacity, especially on IPSAS.

Priorities for 2014–2015 include: (i) continued improvement to internal processes and ensuring that staff have up-to-date skills and knowledge to effectively carry out their functions; (ii) securing further investments to ensure that SAP is a core system of the Agency with additional

functionalities to support effective management of grants, budget, and reporting; and (iii) a strategic approach to resource mobilization to capture increased external opportunities.

Resources 2014–2015

Regular budget:	allocation	€ 2 156 155
	approved posts	11
Extra-budgetary resources:	allocation	€ 398 068
	approved posts	2

Area 5 Information Technology Services

The Information Technology Services develop, manage, support, and maintain the computing and networking resources, ensuring appropriate hardware and software configurations for delivery of IARC's scientific and administrative programmes.

The considerable upgrade of the network distribution system in the Agency coupled with several other investments included in the IT disaster recovery plan during the 2012–2013 biennium provide for a stable computing environment for users in the office and those connecting to IARC resources remotely. The team works on the principle of ensuring that they are well informed of developments in the IT sector, carefully ascertaining future directions the Agency should consider in moving forward with decisions on corporate or scientific computerized solutions to ensure continued relevance.

This service area manages the corporate Enterprise Resource Planning (ERP) software and infrastructure, a critical function for the Agency's financial records management.

In meeting the enhanced business process automation requirements and expanding scientific database management of the Agency, new skills are being recruited for and specialized training programmes have been identified to ensure that the team has the skills that fully meet the requirements.

The priorities for 2014–2015 will be: (i) completing the end-to-end automation of IARC business processes, within and outside of SAP; (ii) support to an expected quantum upgrade of IARC's scientific data processing capacities; and (iii) proactive support to IARC's knowledge management systems.

Resources 2014–2015

Regular budget:	allocation	€ 1 142 547
	approved posts	5
Extra-budgetary resources:	allocation	€ 481 400
	approved posts	-

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4. PROPOSED BUDGET 2014–2015

4.1 Presentation

The proposed budget for the biennium 2014–2015 is presented in three appropriation sections:

Appropriation Section 1 – Governing and Scientific Councils

Appropriation Section 2 – Scientific Programme

Appropriation Section 3 – Administrative Programme

The *Governing and Scientific Councils* section includes the budget for estimated costs related to the meetings of the Governing Council and Scientific Council.

The *Scientific Programme* section contains the budget for implementing the proposed Scientific Programme, which is organized in nine programme areas. Each area is further divided into sub-areas, where appropriate. The sub-area is the smallest unit of the budget and may comprise one or more projects.

The *Administrative Programme* section presents the budget for executing administrative services and maintaining basic infrastructure for the Agency. It is further broken down into five administrative services areas.

Two key components in the budget are staff budget and non-staff budget. Staff budget is expressed in monetary cost in euros and/or person-years, where applicable, based on 10 person-months per year to allow for annual leave and public holidays, reflecting more accurately the true cost of performing an activity. Non-staff budget is expressed in financial value in euros and includes all costs other than staff costs.

The proposed 2014–2015 budget is presented in nine summary tables and one supplementary table, of which six tables and the supplementary table include the 2012–2013 approved budget for comparison purposes. All tables can be found in Section 5 of this document.

- **Table A - Proposed regular budget for the biennium 2014–2015:** Provides the overall proposed budget including the total budget of each appropriation section for the biennium.
- **Table B - Summary of biennial resources by area and sources of fund:** Includes financial resources overview for each appropriation section and programme area inclusive of the proposed regular budget allocations and projected extra-budgetary resources (i.e. voluntary contributions, Programme Support Cost account, and Governing Council Special Fund). The 2012–2013 figures are also provided for comparison.
- **Table C - Summary of regular budget by area and year:** Presents further details of the proposed regular budget allocations by year, broken down by staff and non-staff budget.
- **Table D - Summary of regular budget funded staff by area and staff category:** Summarizes the staff in person-years funded by regular budget, allotted to each programme area in comparison with the approved figures for 2012–2013. Number of staff is grouped according to the category of staff, i.e. General Service level and Professional level and above.

- **Table E - Analysis of staffing and resources by area/sub-area:** Provides details of the proposed budget and staffing for 2014–2015 at sub-area level.
- **Table F - Summary of budget changes from previous biennial budget:** Illustrates overall changes to the budget level for 2014–2015 from the approved budget for 2012–2013.
- **Table G - Summary of regular budget by component and cause of increase/decrease:** Presents the proposed budget by component of expenditure in comparison with the approved budget for 2012–2013. The increases or decreases are classified based on two main reasons, i.e. programme requirement and cost changes.
- **Table H - Summary of regular budget and proposed financing:** Provides a summary of the proposed regular budget and proposed funding sources by year, in comparison with those approved for the 2012–2013 budget.
- **Table I - Summary of proposed financing from assessments on Participating States and Governing Council Special Fund:** Provides the details of assessments on Participating States and other resources required to fund the proposed budget, including comparison with those approved for the 2012–2013 budget.
- **Table I-a - Comparison of assessments on Participating States based on current and revised scales:** Provides supplementary information to Table I by comparing the assessments on Participating States based on the scale used in the current 2012–2013 budget and the revised scale effective from 2014.

Four additional tables are also provided as Annexes at the end of this document for informational purposes:

- **Information Table A - Total staff and non-staff budget by Section and Group:** Provides details of staff and non-staff budget annual allocation by Section and Group.
- **Information Table B - Annual inflation rates in France 2002–2011:** Provides the inflation rate as at 31 December for each year from 2002 to 2011.
- **Information Table C - United Nations accounting rates of exchange: Euro to US Dollar, January 2004 to February 2013:** Contains the monthly exchange rates set by the United Nations for euro to US dollar.
- **Information Table D - Group classification of countries and assigning units for assessed contributions based on current and revised scales of WHO:** Provides the comparison of group classification and units assigned for each Participating State using the methodology approved in resolution GC/15/R9 and based on the current and revised scales of WHO.

4.2 Changes in budget presentation

The proposed budget is presented in three appropriation sections as in prior biennial budgets. Two changes are made in the presentation of the proposed 2014–2015 biennial budget in Appropriation Sections 2 and 3, as follows.

- Under Appropriation Section 3, the budget for the IARC Grants Office, which was presented on a separate budget line in 2012–2013, is now included in Area 4 of Section 3 following the integration of the IARC Grants Office into the Budget and Finance Office. The description of Area 4 is revised to Grants, Budget, and Finance services. Accordingly, the 2012–2013 figures on this line were adjusted to enable the comparison with the proposed 2014–2015 budget.
- A portion of non-staff budget for activities contributing directly to the Scientific Programme that used to be reported under Appropriation Section 3 Administrative Programme, Area 3 Conference, Office, and Building Services, has been moved to Appropriation Section 2 Scientific Programme, Area 8 Scientific Support. Careful analysis has been conducted to identify the relevant cost items and to apportion the move based on headcounts of associated units. The result reflects more correctly the distribution of the Agency’s costs of the scientific programme and administrative services. For better comparison with the 2012–2013 approved budget, the moved budget is shown as a separate line in Tables B, C, and D.

These changes have no impact on the overall level of Scientific Programme budget allocation and are a purely presentational change, as illustrated in the below table (please see also Table B). If there were no change in the presentation, the budget allocated to the Scientific Programme in 2014–2015 would be 73.70%, an increase from that approved for 2012–2013, and the budget for the Administrative Programme would decrease from 27.34% in 2012–2013 to 25.87% in 2014–2015. After the changes, the Administrative Programme budget is further decreased to 21.50%.

Description	2012–2013	2014–2015
Section 2 before the changes	72.26%	73.70%
Section 3 moved to Section 2		4.37%
Section 2 after the changes		78.07%
Section 3 before the changes	27.34%	25.87%
Section 3 moved to Section 2		4.37%
Section 3 after the changes		21.50%

4.3 Development of the programme and budget

The development of the programme and budget for this biennium started with review of the current situation, progress to date, and future direction of the Agency in line with the Medium-Term Strategy. Section Heads and Group Heads then prepared draft programme and budget proposals using Project Abstract Sheets (PAS) based on the Indicative Planning Figures (IPF) provided to each Section/Group.

Budget planning meetings were organized to provide an opportunity for the submitting units to present and discuss the proposals with the Director. Following the confirmation of the final planning figures, PAS were finalized. The Senior Leadership Team reviewed and endorsed the

consolidated programme and budget proposals to be submitted to the Scientific Council for review and to the Governing Council for approval.

The proposed budget is developed in euros in accordance with Article III.3.1 of the Financial Regulations, which became effective 1 January 2009. The staff costs are calculated by applying standard staff costs by staff category and grade to the number of posts contained in the proposed budget.

Similar to prior years, the IARC programme budget is an integrated budget. This means that programme and budget proposals are developed in consideration of anticipated financing from both regular and extra-budgetary resources. Extra-budgetary resources include the confirmed voluntary designated contributions as of the planning date, and resources from the Programme Support Cost (PSC) account and the Governing Council Special Fund (GCSF) account.

Resources from the PSC account are to be used at the discretion of the Director of the Agency to meet administrative costs connected with activities financed by voluntary designated contributions. The extra-budgetary resources under the Administrative Programme budget section reflect use of this account.

The development of the budget gave priority to maintaining the minimum level of (i) core staff capacity and (ii) non-staff budget, to enable a meaningful implementation of the proposed Scientific Programme. Non-staff budget for the Scientific Programme, in particular, was decreased by 20%, from €12.7 million in 2010–2011 to €10.1 million in 2012–2013, to absorb the rise in staff costs. While staff costs continue to grow, it is not sustainable to apply the same approach for 2014–2015. Non-staff budget should not be reduced below the floor of €10 million.

4.4 Explanation of the proposed regular budget

4.4.1 Overall budget and distribution

The budget level proposed for 2014–2015 is **€41 214 017**, €31 162 177 (75.61%) for staff budget and €10 051 840 (24.39%) for non-staff budget. The distribution of budget by appropriation section is as follows:

0.44%	Governing and Scientific Councils
78.06%	Scientific Programme
21.50%	Administrative Programme

For the Scientific Programme budget, the distribution by programme area is similar to that approved for 2012–2013. The share of Scientific Support is increased from 2012–2013 partly due to the move of some of the budget (4.37%) from Section 3 Administrative Programme to Section 2 Scientific Programme, as explained in paragraph 4.2 above.

Further details of the proposed budget can be found in Tables A, B, C, and E.

4.4.2 Staff distribution

The total number of staff in 2014 is slightly higher than in 2015 (154.4 vs 153.65), as 2014 is a transition year when new posts are added in view of natural attrition through retirements to be

realized in 2015. The net result is 1.10 posts higher in 2014 than in 2012–2013, with the balancing decrease in 2015.

Staff Category	2012–2013	2014	2015
Professional (P)	65.00	67.00	66.25
General Service (GS)	88.30	87.40	87.40
Total	153.30	154.40	153.65
P and GS distribution	42:58	43:57	43:57

The distribution of posts by staff category is similar to 2012–2013 at 43% Professional and 57% General Service staff.

Table D provides more details of distribution of posts by appropriation section and programme area.

4.4.3 Cost increases

The proposed budget is 4.55% higher than the 2012–2013 approved budget, 3.98% representing a portion of the statutory staff cost increases and 0.57% due to programmatic changes.

The statutory *staff cost increases* over the biennium total €1.5 million. These increases are the result of annual step increases and cost adjustments, beyond the control of the Agency.

The increase from *programmatic changes* is the net change due to staff and non-staff costs. The non-staff budget remains flat with a small decrease (0.46%) from the prior biennium, and the other portion represents the increase in staff costs resulting from post reclassifications and standardization of post grades for certain support functions.

Total staff costs, combining impact from statutory cost increases and programmatic changes, represent a 6.28% increase from the 2012–2013 budget.

The table below provides a summary of budget changes from 2012–2013 by cause and cost component. More details are provided in Tables F and G.

Cost Component	Due to Programme	Due to Statutory Cost	Total	% Change
Staff cost increase/(decrease)	271 813	1 569 629	1 841 442	6.28%
Non-staff cost increase/(decrease)	(46 740)	0	(46 740)	-0.46%
Total cost increase/(decrease)	225 073	1 569 629	1 794 702	
Total % increase/(decrease)	0.57%	3.98%	4.55%	

4.4.4 Decrease in administrative budget

The Administrative Programme budget is planned at €8.86 million or 21.50% of the total proposed budget, compared with 27.34% in 2012–2013. This reduction is due to the change in

presentation, as explained in paragraph 4.2 above, combined with a budget cut. These are illustrated below.

Description	Staff	Non-Staff	Total Budget
2012–2013 Budget	7 113 963	3 662 096	10 776 059
Presentation change (moved to Section 2)		(1 799 000)	(1 799 000)
Real cost cut	(58 020)	(268 896)	(326 916)
Statutory staff cost increase	210 199		210 199
2014–2015 Budget	7 266 142	1 594 200	8 860 342

4.4.5 Integrated budget

The proposed budget follows the integrated budget approach by considering all funding sources for implementing the proposed scientific programme. Extra-budgetary resources planned under Section 2 Scientific Programme are mainly from voluntary contributions, while extra-budgetary resources planned under Section 3 Administrative Programme are from the PSC account.

The ratio of extra-budgetary to regular budget resources increases slightly, from 0.28:1 to 0.31:1. This is the net increase/decrease of voluntary contributions and funding from the PSC account. The increased availability of extra-budgetary funds for the scientific programme is a clear display of the importance of these funding sources and the successful results of the Agency's efforts to actively pursue resource mobilization through grant applications and direct funding. The reduced PSC budget reflects a conservative approach after considerable investments being made in IT and building infrastructure during the 2012–2013 biennium.

Below is a summary and analysis of extra-budgetary resources, as shown in Tables B and E.

Description	2012–2013	2014–2015	% Change
Section 2 – Scientific Programme (from Voluntary Contributions)	8 931 571	11 111 810	24.41%
Section 3 – Administrative Programme (from PSC)	2 291 000	1 619 904	-29.29%
Total extra-budgetary	11 222 571	12 731 714	13.45%
Extra-budgetary to regular budget ratio	0.28:1	0.31:1	

4.4.6 Full assessed contribution from Turkey

Turkey joined IARC in 2011 and benefitting from the gradual increase in assessments until 2013 in accordance with Governing Council Resolution GC/53/R22, will pay its full assessed contributions for the 2014–2015 programme budget. Turkey's contribution of approximately €1.53 million increases the overall level of assessed contributions available during the biennium by 3.99%.

Further details on the assessed contribution from Turkey can be found in Table I.

4.5 Financing of the regular budget

The 2014–2015 regular budget of €41 214 017 is proposed to be funded from assessed contributions from Participating States with support from the GCSF account as follows. Table H provides the details of year-on-year financing.

Funding Source	2012–2013	2014–2015	% Change
Assessed contributions (excl. Turkey)	38 419 315	39 179 076	1.98%
Assessed contributions from Turkey	0	1 534 941	100.00%
Total assessed contributions	38 419 315	40 714 017	5.97%
GCSF	1 000 000	500 000	-50.00%
Total regular budget	39 419 315	41 214 017	4.55%

The overall proposed increase of assessed contributions, excluding Turkey, is 1.98%. The addition of Turkey's contribution enables the Agency to keep non-staff budget at the floor level and partially offset the staff cost increase. We propose to cover the remaining staff cost increase from a small increase in assessed contributions of other Participating States and continued strategic use of the GCSF. The share from the GCSF helps minimize the burden on Participating States, and the 50% decrease from the 2012–2013 biennium reduces the Agency's reliance on this fund.

The proposed budget level, with an overall increase of 4.55%, is the level needed to sustain the required core staff capacity and programme activities of the Agency. This financing option is proposed in consideration of minimum impact to the Participating States to enable the Agency to fulfil the commitments undertaken in the proposed Scientific Programme.

4.6 Assessments on Participating States

The assessments on Participating States are based on the method approved by the Governing Council under resolution GC/15/R9, which references group classification of countries to the WHO scale of assessments.

In December 2012, the United Nations revised scale of assessments was adopted under the United Nations General Assembly resolution 67/238, leading to the proposal, at the 132nd session of the WHO Executive Board on 26 January 2013, that this United Nations scale should be used by WHO for the financial period 2014–2015, adjusted for differences in membership between WHO and the United Nations, in accordance with the usual practice. Under resolution EB132.R6, the Executive Board recommends to the Sixty-sixth World Health Assembly the adoption of the scale of assessments for the biennium 2014–2015 as proposed.

While the final decision from the World Health Assembly on the WHO revised scale of assessments will be confirmed in May 2013, the approval is anticipated. Accordingly, IARC has applied this revised scale to the assessments on Participating States in the proposed 2014–2015 budget. Table I provides the assessments of contributions for each Participating State accordingly.

The information related to revision of the WHO scale of assessments was known after document SC/49/8, *Draft Proposed Programme (2014–2017) and Budget (2014–2015)*, was submitted to the Scientific Council. As a result, Table I in document SC/49/8 shows different figures as it was based on the current scale of assessments. This document is now revised to provide the updated information in Table I. For ease of reference, Table I-a is now added to display the comparison of assessments on Participating States using the current and revised scales. For further information on group classification of countries, please refer to Information Table D.

Prior to revised scale of assessments:

The impact of the proposed budget on each individual Participating State varies. Prior to the change in scale of assessments, the impact as compared to the approved 2012–2013 biennium budget was between 1.16% and 2.80%, as summarized below. For comparison, the inflation rate in France was 2.40% in 2011 (see Information Table B).

% Increase	Amount* Increase (€)	Participating States
1.16%	14 802	Ireland
1.57%	23 522	Australia, Austria, Belgium, Denmark, Finland, India, Netherlands, Norway, Russian Federation, Sweden, Switzerland
1.88%	32 249	Canada, Republic of Korea, Spain
2.31%	49 688	France, Italy, UK
2.80%	84 571	Germany, Japan, USA

*Amount increase for the biennium budget.

With the revised scale of assessments:

The revised scale of assessments has no impact to the overall budget level being proposed. The revision of the WHO scale of assessments, which is beyond the control of the Agency, resulted in a change in group classification for four IARC Participating States: Australia, Germany, Republic of Korea, and Russian Federation. This led to the redistribution of assessed contributions across all Participating States.

More precisely, the change in group classification in these four Participating States resulted in the redistribution of €558 819 to the remaining Participating States (except Ireland).

Participating States	Current Group Classification	Revised Group Classification	Assessment Amount Increase/(Decrease) due to revised scale (€)
Australia	4	3	252 799
Germany	1	2	(851 534)
Republic of Korea	3	4	(212 883)
Russian Federation	4	3	252 799
Net assessment decrease being redistributed to other Participating States			(558 819)

The net impact of the proposed budget on each individual Participating State as compared to the approved 2012–2013 biennium budget is therefore as follows:

% Increase/ Decrease	Amount (€)* Increase/ (Decrease)	Participating States
-25.39%	(766 964)	Germany
-10.53%	(180 634)	Republic of Korea
1.16%	14 802	Ireland
2.46%	36 828	Austria, Belgium, Denmark, Finland, India, Netherlands, Norway, Sweden, Switzerland
3.43%	58 589	Canada, Spain
4.79%	102 907	France, Italy, UK
6.32%	191 012	Japan, USA
18.44%	276 321	Australia, Russian Federation

*Amount increase/(decrease) for the biennium budget.

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5. BUDGET TABLES
(pages 53-64)

Summary Table A	
PROPOSED REGULAR BUDGET FOR THE BIENNIUM 2014-2015	
<i>(expressed in euros)</i>	
APPROPRIATION SECTION	2014-2015 BUDGET
1. Governing and Scientific Councils	180,000
2. Scientific Programme	32,173,675
3. Administrative Programme	8,860,342
SUB-TOTAL	41,214,017
<u>Less:</u> Unprogrammed reserve	0
TOTAL BUDGET	41,214,017

Summary Table B							
SUMMARY OF BIENNIAL RESOURCES BY AREA AND SOURCES OF FUND							
<i>(expressed in euros)</i>							
Appr. Section	APPROPRIATION SECTION TITLE	Regular Budget				Extra-Budgetary Resources	
		2012-2013 Budget Amount	%	2014-2015 Budget Amount	%	2012-2013 Budget Amount	2014-2015 Budget Amount
1	GOVERNING AND SCIENTIFIC COUNCILS						
1.1	Governing and Scientific Councils	158,378	0.40	180,000	0.44	0	0
	Total: Governing and Scientific Councils	158,378	0.40	180,000	0.44	0	0
2	SCIENTIFIC PROGRAMME					(see note i.)	
2.1	Describing the Global Cancer Burden	2,379,510	6.04	2,736,221	6.64	279,260	40,000
2.2	IARC Monographs	1,799,176	4.56	1,974,841	4.79	1,431,919	1,193,653
2.3	Cancer Etiology	9,437,951	23.94	8,354,795	20.27	1,409,808	3,797,705
2.4	Mechanisms of Carcinogenesis	3,131,507	7.94	2,970,475	7.21	321,000	495,062
2.5	Cancer Prevention	1,968,899	4.99	2,380,372	5.78	3,382,724	2,508,666
2.6	Education and Training	1,580,992	4.01	1,524,233	3.70	764,860	676,406
2.7	Methodology and Research Tools	1,932,286	4.90	3,147,633	7.64	654,400	1,759,161
2.8	Scientific Support	3,418,864	8.67	4,557,562	11.06	687,600	641,157
2.8	Scientific Support - transferred from section 3 (see note ii.)			1,799,000	4.37	0	0
2.9	Research Leadership and Management	2,835,694	7.19	2,728,543	6.62	0	0
	Unprogrammed reserve	0	0.00	0	0.00	0	0
	Total: Scientific Programme	28,484,878	72.26	32,173,675	78.06	8,931,571	11,111,810
3	ADMINISTRATIVE PROGRAMME					(see note iii.)	
3.1	Administrative Management	943,373	2.39	973,126	2.36	20,000	20,000
3.2	Human Resources Services	924,043	2.34	972,946	2.36	243,500	372,436
3.3	Conference, Office and Building Services (see note ii.)	5,461,045	13.85	3,615,568	8.77	900,000	348,000
3.4	Grant, Budget and Finance Services	2,098,646	5.32	2,156,155	5.23	240,000	398,068
3.5	Information Technology Services	1,348,951	3.42	1,142,547	2.77	887,500	481,400
	Total: Administrative Programme	10,776,059	27.34	8,860,342	21.50	2,291,000	1,619,904
	TOTAL	39,419,315	100.00	41,214,017	100.00	11,222,571	12,731,714

Notes:

- i. Extra-budgetary resources include secured Voluntary Contributions, funding from Programme Support Cost Account and the Governing Council Special Fund.
- ii. Direct scientific support costs (non-staff) which used to be included under Administrative Programme, area 3.3, is moved to Scientific Programme, area 8 in 2014-2015 budget to reflect the true cost of the Scientific Programme. It is showing as a separate line of area 8 to enable the meaningful comparison of area 8 with 2012-2013.
- iii. Extra-budgetary resource under Administrative Programme is the fund from Programme Support Cost (PSC) Account. The figures under 2012-2013 column differ from those shown in the approved budget document 2012-2013. These revised figures for 2012-2013 reflect the adjustments made to capture actual allocations.

Summary Table C										
SUMMARY OF REGULAR BUDGET BY AREA AND YEAR										
<i>(expressed in euros)</i>										
Appr. Section	APPROPRIATION SECTION TITLE	2014			2015			2014-2015		
Area	Area Title	Staff Budget	Non-Staff Budget	Total	Staff Budget	Non-Staff Budget	Total	Staff Budget	Non-Staff Budget	Total
1	GOVERNING AND SCIENTIFIC COUNCILS									
1.1	Governing and Scientific Councils	0	90,000	90,000	0	90,000	90,000	0	180,000	180,000
	Total: Governing and Scientific Councils	0	90,000	90,000	0	90,000	90,000	0	180,000	180,000
2	SCIENTIFIC PROGRAMME									
2.1	Describing the Global Cancer Burden	1,168,036	176,000	1,344,036	1,216,185	176,000	1,392,185	2,384,221	352,000	2,736,221
2.2	IARC Monographs	868,407	93,500	961,907	919,434	93,500	1,012,934	1,787,841	187,000	1,974,841
2.3	Cancer Etiology	3,500,044	569,500	4,069,544	3,736,751	548,500	4,285,251	7,236,795	1,118,000	8,354,795
2.4	Mechanisms of Carcinogenesis	1,130,685	323,000	1,453,685	1,193,790	323,000	1,516,790	2,324,475	646,000	2,970,475
2.5	Cancer Prevention	966,166	336,400	1,302,566	822,206	255,600	1,077,806	1,788,372	592,000	2,380,372
2.6	Education and Training	283,487	477,000	760,487	286,746	477,000	763,746	570,233	954,000	1,524,233
2.7	Methodology and Research Tools	1,344,613	186,500	1,531,113	1,430,020	186,500	1,616,520	2,774,633	373,000	3,147,633
2.8	Scientific Support	1,782,315	437,376	2,219,691	1,892,127	445,744	2,337,871	3,674,442	883,120	4,557,562
2.8	Scientific Support - transferred from section 3	0	899,500	899,500	0	899,500	899,500	0	1,799,000	1,799,000
2.9	Research Leadership and Management	665,364	686,760	1,352,124	689,659	686,760	1,376,419	1,355,023	1,373,520	2,728,543
	Unprogrammed reserve	0	0	0	0	0	0	0	0	0
	Total: Scientific Programme	11,709,117	4,185,536	15,894,653	12,186,918	4,092,104	16,279,022	23,896,035	8,277,640	32,173,675
3	ADMINISTRATIVE PROGRAMME									
3.1	Administrative Management	463,677	10,000	473,677	489,449	10,000	499,449	953,126	20,000	973,126
3.2	Human Resources Services	468,135	6,000	474,135	492,811	6,000	498,811	960,946	12,000	972,946
3.3	Conference, Office and Building Services	1,064,753	717,600	1,782,353	1,115,615	717,600	1,833,215	2,180,368	1,435,200	3,615,568
3.4	Grant, Budget and Finance Services	1,046,416	3,000	1,049,416	1,103,739	3,000	1,106,739	2,150,155	6,000	2,156,155
3.5	Information Technology Services	496,750	60,500	557,250	524,797	60,500	585,297	1,021,547	121,000	1,142,547
	Total: Administrative Programme	3,539,731	797,100	4,336,831	3,726,411	797,100	4,523,511	7,266,142	1,594,200	8,860,342
	TOTAL	15,248,848	5,072,636	20,321,484	15,913,329	4,979,204	20,892,533	31,162,177	10,051,840	41,214,017

Summary Table D										
SUMMARY OF REGULAR BUDGET FUNDED STAFF BY AREA AND STAFF CATEGORY										
<i>(expressed in person years)</i>										
Appr. Section	APPROPRIATION SECTION TITLE	2012-2013 Staff Budget (person years)			2014 Staff Activity (person years)			2015 Staff Activity (person years)		
Area	Area Title	Professional and above	General Service	Total Staff	Professional and above	General Service	Total Staff	Professional and above	General Service	Total Staff
1	GOVERNING AND SCIENTIFIC COUNCILS									
1.1	Governing and Scientific Councils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total: Governing and Scientific Councils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	SCIENTIFIC PROGRAMME									
2.1	Describing the Global Cancer Burden	4.75	4.95	9.70	6.00	5.00	11.00	6.00	5.00	11.00
2.2	IARC Monographs	4.95	1.20	6.15	5.00	1.75	6.75	5.00	1.75	6.75
2.3	Cancer Etiology	21.36	19.54	40.90	16.53	16.85	33.38	16.73	16.95	33.68
2.4	Mechanisms of Carcinogenesis	6.45	6.90	13.35	5.65	6.55	12.20	5.65	6.55	12.20
2.5	Cancer Prevention	2.95	3.00	5.95	4.30	4.10	8.40	3.30	4.00	7.30
2.6	Education and Training	1.05	2.00	3.05	1.00	2.00	3.00	1.00	2.00	3.00
2.7	Methodology and Research Tools	3.40	5.00	8.40	6.82	6.00	12.82	6.87	6.00	12.87
2.8	Scientific Support	5.34	11.56	16.90	7.70	13.55	21.25	7.70	13.55	21.25
2.8	Scientific Support - transferred from section 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.9	Research Leadership and Management	2.75	3.65	6.40	2.00	2.50	4.50	2.00	2.50	4.50
	Total: Scientific Programme	53.00	57.80	110.80	55.00	58.30	113.30	54.25	58.30	112.55
3	ADMINISTRATIVE PROGRAMME									
3.1	Administrative Management	2.00	2.00	4.00	2.00	2.00	4.00	2.00	2.00	4.00
3.2	Human Resources Services	1.00	4.00	5.00	1.00	4.10	5.10	1.00	4.10	5.10
3.3	Conference, Office and Building Services	1.00	15.50	16.50	1.00	15.00	16.00	1.00	15.00	16.00
3.4	Grant, Budget and Finance Services	4.00	7.00	11.00	5.00	6.00	11.00	5.00	6.00	11.00
3.5	Information Technology Services	4.00	2.00	6.00	3.00	2.00	5.00	3.00	2.00	5.00
	Total: Administrative Programme	12.00	30.50	42.50	12.00	29.10	41.10	12.00	29.10	41.10
	TOTAL	65.00	88.30	153.30	67.00	87.40	154.40	66.25	87.40	153.65

Summary Table E

ANALYSIS OF STAFFING AND RESOURCES BY AREA/SUB-AREA OF APPROPRIATION SECTION 1 GOVERNING AND SCIENTIFIC COUNCILS

(Staff activity expressed in person years and budget expressed in euros)

1/3

Area	Area Description	Sub-Area	Sub-Area Description	2014 STAFF ACTIVITY		2015 STAFF ACTIVITY		REGULAR BUDGETARY RESOURCES			EXTRA-BUDGETARY RESOURCES		
				Professional and above	General Service	Professional and above	General Service	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015
1	Governing and Scientific Councils			-	-	-	-	-	180,000	180,000	-	-	-
TOTAL GOVERNING AND SCIENTIFIC COUNCILS				-	-	-	-	-	180,000	180,000	-	-	-

Summary Table E ANALYSIS OF STAFFING AND RESOURCES BY AREA/SUB-AREA OF APPROPRIATION SECTION 2 SCIENTIFIC PROGRAMME <i>(Staff activity expressed in person years and budget expressed in euros)</i>													2/3
Area	Area Description	Sub-Area	Sub-Area Description	2014 STAFF ACTIVITY		2015 STAFF ACTIVITY		REGULAR BUDGETARY RESOURCES			EXTRA-BUDGETARY RESOURCES		
				Professional and above	General Service	Professional and above	General Service	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015
1	Describing the Global Cancer Burden			6.00	5.00	6.00	5.00	2,384,221	352,000	2,736,221	-	40,000	40,000
Total Area 1				6.00	5.00	6.00	5.00	2,384,221	352,000	2,736,221	-	40,000	40,000
2	IARC Monographs			5.00	1.75	5.00	1.75	1,787,841	187,000	1,974,841	1,003,233	190,420	1,193,653
Total Area 2				5.00	1.75	5.00	1.75	1,787,841	187,000	1,974,841	1,003,233	190,420	1,193,653
3	Cancer Etiology	3.1	Infections	6.75	5.65	6.75	5.65	2,679,035	350,000	3,029,035	228,317	812,956	1,041,273
		3.2	Nutrition and Metabolism	3.00	2.00	3.00	2.00	1,189,240	124,000	1,313,240	-	247,077	247,077
		3.3	Genetics	3.13	4.86	3.13	4.86	1,614,404	244,000	1,858,404	422,684	1,774,171	2,196,855
		3.4	Environment, radiation, lifestyle, and occupation	3.65	4.34	3.85	4.44	1,754,116	400,000	2,154,116	51,000	261,500	312,500
Total Area 3				16.53	16.85	16.73	16.95	7,236,795	1,118,000	8,354,795	702,001	3,095,704	3,797,705
4	Mechanisms of Carcinogenesis	4.1	Molecular Carcinogenesis	3.00	2.00	3.00	2.00	963,614	176,000	1,139,614	-	-	-
		4.2	Epigenetics	2.00	3.00	2.00	3.00	933,016	256,000	1,189,016	-	495,062	495,062
		4.3	Molecular Pathology	0.65	1.55	0.65	1.55	427,845	214,000	641,845	-	-	-
Total Area 4				5.65	6.55	5.65	6.55	2,324,475	646,000	2,970,475	-	495,062	495,062
5	Cancer Prevention	5.1	Primary Prevention	2.30	1.70	1.83	1.60	885,183	375,300	1,260,483	1,016,778	1,091,857	2,108,635
		5.2	Screening	2.00	2.40	1.47	2.40	903,189	216,700	1,119,889	86,868	313,163	400,031
Total Area 5				4.30	4.10	3.30	4.00	1,788,372	592,000	2,380,372	1,103,646	1,405,020	2,508,666
6	Education and Training	6.1	IARC Research Training and Fellowship Programme	0.50	1.00	0.50	1.00	289,538	771,000	1,060,538	-	676,406	676,406
		6.2	IARC Courses	0.50	1.00	0.50	1.00	280,695	183,000	463,695	-	-	-
Total Area 6				1.00	2.00	1.00	2.00	570,233	954,000	1,524,233	-	676,406	676,406
7	Methodology and Research Tools	7.1	Biostatistics /Bioinformatics	2.27	0.60	2.27	0.60	709,568	74,000	783,568	-	-	-
		7.2	Exposure Assessment	1.30	2.55	1.35	2.55	808,861	136,000	944,861	-	69,786	69,786
		7.3	Biomarkers	2.95	2.45	2.95	2.45	1,095,054	124,000	1,219,054	-	358,594	358,594
		7.4	WHO Classification of Tumours	0.30	0.40	0.30	0.40	161,150	39,000	200,150	653,863	676,918	1,330,781
Total Area 7				6.82	6.00	6.87	6.00	2,774,633	373,000	3,147,633	653,863	1,105,298	1,759,161
8	Scientific Support	8.1	Laboratory Services	2.10	6.65	2.10	6.55	1,283,193	385,000	1,668,193	-	-	-
		8.2	Biobank	0.60	3.65	0.60	3.75	555,787	209,000	764,787	442,079	80,000	522,079
		8.3	Communication	5.00	3.25	5.00	3.25	1,835,462	289,120	2,124,582	119,079	-	119,079
		8.4	Research Facilitation	-	-	-	-	-	1,799,000	1,799,000	-	-	-
Total Area 8				7.70	13.55	7.70	13.55	3,674,442	2,682,120	6,356,562	561,157	80,000	641,157
9	Research Leadership and Management	9.1	Direction and Leadership	0.70	0.80	0.70	0.80	463,301	575,520	1,038,821	-	-	-
		9.2	Programme Management and Development	1.25	1.25	1.25	1.25	799,841	750,000	1,549,841	-	-	-
		9.3	Ethics	0.05	0.45	0.05	0.45	91,881	48,000	139,881	-	-	-
Total Area 9				2.00	2.50	2.00	2.50	1,355,023	1,373,520	2,728,543	-	-	-
TOTAL SCIENTIFIC PROGRAMME				55.00	58.30	54.25	58.30	23,896,035	8,277,640	32,173,675	4,023,900	7,087,910	11,111,810

Summary Table E

ANALYSIS OF STAFFING AND RESOURCES BY AREA/SUB-AREA OF APPROPRIATION SECTION 3 ADMINISTRATIVE PROGRAMME

(Staff activity expressed in person years and budget expressed in euros)

3/3

Area	Area Description	Sub-Area	Sub-Area Description	2014 STAFF ACTIVITY		2015 STAFF ACTIVITY		REGULAR BUDGETARY RESOURCES			EXTRA-BUDGETARY RESOURCES		
				Professional and above	General Service	Professional and above	General Service	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015	Staff Budget 2014-2015	Non-staff Budget 2014-2015	Total 2014-2015
1	Administrative Management			2.00	2.00	2.00	2.00	953,126	20,000	973,126	-	20,000	20,000
2	Human Resources Services			1.00	4.10	1.00	4.10	960,946	12,000	972,946	357,236	15,200	372,436
3	Conference, Office and Building Services			1.00	15.00	1.00	15.00	2,180,368	1,435,200	3,615,568	-	348,000	348,000
4	Grant, Budget and Finance Services			5.00	6.00	5.00	6.00	2,150,155	6,000	2,156,155	298,068	100,000	398,068
5	Information Technology Services			3.00	2.00	3.00	2.00	1,021,547	121,000	1,142,547	-	481,400	481,400
TOTAL ADMINISTRATIVE PROGRAMME				12.00	29.10	12.00	29.10	7,266,142	1,594,200	8,860,342	655,304	964,600	1,619,904

Summary Table F SUMMARY OF BUDGET CHANGES FROM PREVIOUS BIENNIAL BUDGET <i>(expressed in euros)</i>		
Description	Amount (euros)	Percentage increase/decrease from 2012-2013
1. Budget for 2012-2013	39,419,315	
2. Real programme increase / (decrease)	225,073	0.57%
3. Increase / (decrease) to unprogrammed reserve	0	0.00%
4. Cost increases / (decreases) due to statutory costs and inflation	1,569,629	3.98%
5. Budget for 2014-2015	41,214,017	4.55%

Summary Table G										
SUMMARY OF REGULAR BUDGET BY COMPONENT AND CAUSE OF INCREASE/DECREASE										
<i>(expressed in euros)</i>										
COMPONENT	2012-2013 Budget			2014-2015 Budget			BIENNIAL INCREASE/(DECREASE) 2012-2013 TO 2014-2015			
	2012	2013	2012-2013	2014	2015	2014-2015	Programme (see below note)	Cost	Total	%
Staff Budget:										
Professional	8,920,280	9,170,005	18,090,285	9,662,724	10,102,109	19,764,833	544,118	1,130,430	1,674,548	9.26%
General Service	5,531,390	5,699,060	11,230,450	5,586,124	5,811,220	11,397,344	(272,305)	439,199	166,894	1.49%
Total Staff Costs	14,451,670	14,869,065	29,320,735	15,248,848	15,913,329	31,162,177	271,813	1,569,629	1,841,442	6.28%
Non-Staff Budget:										
Temporary assistance	145,430	148,430	293,860	64,500	52,500	117,000	(176,860)	0	(176,860)	-60.19%
Temporary advisors (experts, not coming for meetings)	231,425	231,425	462,850	269,700	260,700	530,400	67,550	0	67,550	14.59%
Other contractual arrangements (APWs, SSAs and consultants)				147,500	138,500	286,000	286,000	0	286,000	100.00%
Meetings (temporary advisors and participants)	309,615	286,615	596,230	284,000	253,000	537,000	(59,230)	0	(59,230)	-9.93%
Duty travel (all categories of staff including fellows)	339,085	343,085	682,170	331,600	325,400	657,000	(25,170)	0	(25,170)	-3.69%
Collaborative research agreements	516,700	520,700	1,037,400	281,500	281,500	563,000	(474,400)	0	(474,400)	-45.73%
Supplies	614,770	607,770	1,222,540	413,650	412,650	826,300	(396,240)	0	(396,240)	-32.41%
Equipment and furniture	59,495	57,495	116,990	184,816	188,184	373,000	256,010	0	256,010	218.83%
Fellowships	651,590	641,590	1,293,180	689,000	663,000	1,352,000	58,820	0	58,820	4.55%
Office services	392,870	391,870	784,740	154,930	152,330	307,260	(477,480)	0	(477,480)	-60.85%
Publications (including printing)	27705	27,705	55,410	121,000	121,000	242,000	186,590	0	186,590	336.74%
Library books & periodicals	114,020	114,020	228,040	125,000	125,000	250,000	21,960	0	21,960	9.63%
Laboratory maintenance and supplies				93,500	93,500	187,000	187,000	0	187,000	100.00%
IT maintenance and licences	41,655	41,655	83,310	17,500	17,500	35,000	(48,310)	0	(48,310)	-57.99%
Building services	1,239,585	1,239,585	2,479,170	1,439,440	1,439,440	2,878,880	399,710	0	399,710	16.12%
Building renovation	99,180	99,180	198,360	0	0	0	(198,360)	0	(198,360)	-100.00%
Staff Development & Training	84,055	84,055	168,110	80,000	80,000	160,000	(8,110)	0	(8,110)	-4.82%
Director's Development Provision	198,110	198,110	396,220	375,000	375,000	750,000	353,780	0	353,780	89.29%
	5,065,290	5,033,290	10,098,580	5,072,636	4,979,204	10,051,840	(46,740)	0	(46,740)	-0.46%
Unprogrammed reserve	0	0	0	0	0	0	0	0	0	0.00%
TOTAL REGULAR BUDGET	19,516,960	19,902,355	39,419,315	20,321,484	20,892,533	41,214,017	225,073 0.57%	1,569,629 3.98%	1,794,702 4.55%	4.55%

Note: Causes of budget changes are classified into two groups i.e. due to programmatic requirements ('Programme') and due to cost changes ('Cost').

Summary Table H SUMMARY OF REGULAR BUDGET AND PROPOSED FINANCING <i>(expressed in euros)</i>								
APPROPRIATION SECTION	2012	2013	2012-2013	%	2014	2015	2014-2015	%
1. Governing and Scientific Councils	79,192	79,186	158,378	0.40%	90,000	90,000	180,000	0.44%
2. Scientific Programme	14,101,595	14,383,283	28,484,878	72.26%	15,894,653	16,279,022	32,173,675	78.06%
3. Administrative Programme	5,336,174	5,439,886	10,776,059	27.34%	4,336,831	4,523,511	8,860,342	21.50%
Total Regular Budget	19,516,960	19,902,355	39,419,315	100.00%	20,321,484	20,892,533	41,214,017	100.00%
PROPOSED FINANCING: (see Summary Table D)								
Governing Council Special Fund	500,000	500,000	1,000,000	2.54%	250,000	250,000	500,000	1.21%
Participating States Assessments	19,016,960	19,402,355	38,419,315	97.46%	20,071,484	20,642,533	40,714,017	98.79%

Summary Table I											
SUMMARY OF PROPOSED FINANCING FROM ASSESSMENTS ON PARTICIPATING STATES AND GOVERNING COUNCIL SPECIAL FUND											
<i>(expressed in euros)</i>											
PARTICIPATING STATES	NUMBER OF UNITS ASSIGNED	YEAR 2014			YEAR 2015			BIENNIUM 2014-2015	BIENNIUM 2012-2013	2014-2015 2012-2013	2014-2015 2012-2013
		70% of the assessed budget borne equally	30% of the assessed budget in accordance with the unit system	TOTAL	70% of the assessed budget borne equally	30% of the assessed budget in accordance with the unit system	TOTAL	TOTAL	TOTAL	% increase/decrease	Amount increase/(decrease)
AUSTRALIA	2	638,638	236,135	874,773	656,808	242,853	899,661	1,774,434	1,498,113	18.44	276,321
AUSTRIA	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
BELGIUM	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
CANADA	2	638,638	236,135	874,773	656,808	242,853	899,661	1,774,434	1,715,575	3.43	58,859
DENMARK	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
FINLAND	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
FRANCE	4	638,638	472,270	1,110,908	656,808	485,706	1,142,514	2,253,422	2,150,515	4.79	102,907
GERMANY	4	638,638	472,270	1,110,908	656,808	485,706	1,142,514	2,253,422	3,020,386	-25.39	(766,964)
INDIA	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
IRELAND	0	638,638	0	638,638	656,808	0	656,808	1,295,446	1,280,644	1.16	14,802
ITALY	4	638,638	472,270	1,110,908	656,808	485,706	1,142,514	2,253,422	2,150,515	4.79	102,907
JAPAN	8	638,638	944,540	1,583,178	656,808	971,412	1,628,220	3,211,398	3,020,386	6.32	191,012
NETHERLANDS	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
NORWAY	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
REPUBLIC OF KOREA	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,715,575	-10.53	(180,634)
RUSSIAN FEDERATION	2	638,638	236,135	874,773	656,808	242,853	899,661	1,774,434	1,498,113	18.44	276,321
SPAIN	2	638,638	236,135	874,773	656,808	242,853	899,661	1,774,434	1,715,575	3.43	58,859
SWEDEN	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
SWITZERLAND	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	1,498,113	2.46	36,828
TURKEY	1	638,638	118,068	756,706	656,808	121,427	778,235	1,534,941	0		1,534,941
UNITED KINGDOM	4	638,638	472,270	1,110,908	656,808	485,706	1,142,514	2,253,422	2,150,515	4.79	102,907
UNITED STATES OF AMERICA	8	638,638	944,540	1,583,178	656,808	971,412	1,628,220	3,211,398	3,020,386	6.32	191,012
TOTAL PARTICIPATING STATES	51	14,050,036	6,021,448	20,071,484	14,449,776	6,192,757	20,642,533	40,714,017	38,419,315	5.97	2,294,702
TOTAL GCSF				250,000			250,000	500,000	1,000,000	-50.00	(500,000)
TOTAL FUNDING		14,050,036	6,021,448	20,321,484	14,449,776	6,192,757	20,892,533	41,214,017	39,419,315	4.55	1,794,702

Notes:

- The method of assessment of contributions of Participating States is detailed in Resolutions GC/15/R9 and GC/37/R9.
- Group classification of countries for the purpose of assigning units in accordance with the revised scale of assessments for WHO starting 2014, which will be presented to the World Health Assembly in May 2013.
- Turkey's contribution is included in the 5.97% increase in overall assessment for 2014-2015. When excluding Turkey, overall assessment increase is 1.98%. Additional contribution from Turkey increases overall level of assessed contributions by 3.99%.

Summary Table I-a												
COMPARISON OF ASSESSMENTS ON PARTICIPATING STATES BASED ON CURRENT AND REVISED SCALES												
<i>(expressed in euros)</i>												
PARTICIPATING STATES	Current Scale for 2014-2015					Revised Scale for 2014-2015					Incremental increase/(decrease) from current to revised scale	Change in country group classification
	Units	2014-2015	2012-2013	% increase	Amount increase	Units	2014-2015	2012-2013	% increase/decrease	Amount increase/(decrease)		
Australia	1	1,521,635	1,498,113	1.57	23,522	2	1,774,434	1,498,113	18.44	276,321	252,799	change from group 4 to 3
Austria	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Belgium	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Canada	2	1,747,824	1,715,575	1.88	32,249	2	1,774,434	1,715,575	3.43	58,859	26,610	
Denmark	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Finland	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
France	4	2,200,202	2,150,515	2.31	49,687	4	2,253,422	2,150,515	4.79	102,907	53,220	
Germany	8	3,104,956	3,020,386	2.80	84,570	4	2,253,422	3,020,386	-25.39	(766,964)	(851,534)	change from group 1 to 2
India	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Ireland	0	1,295,446	1,280,644	1.16	14,802	0	1,295,446	1,280,644	1.16	14,802	0	
Italy	4	2,200,202	2,150,515	2.31	49,687	4	2,253,422	2,150,515	4.79	102,907	53,220	
Japan	8	3,104,956	3,020,386	2.80	84,570	8	3,211,398	3,020,386	6.32	191,012	106,442	
Netherlands	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Norway	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Republic of Korea	2	1,747,824	1,715,575	1.88	32,249	1	1,534,941	1,715,575	-10.53	(180,634)	(212,883)	change from group 3 to 4
Russian Federation	1	1,521,635	1,498,113	1.57	23,522	2	1,774,434	1,498,113	18.44	276,321	252,799	change from group 4 to 3
Spain	2	1,747,824	1,715,575	1.88	32,249	2	1,774,434	1,715,575	3.43	58,859	26,610	
Sweden	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Switzerland	1	1,521,635	1,498,113	1.57	23,522	1	1,534,941	1,498,113	2.46	36,828	13,306	
Turkey	1	1,521,635	0		1,521,635	1	1,534,941	0		1,534,941	13,306	
United Kingdom	4	2,200,202	2,150,515	2.31	49,687	4	2,253,422	2,150,515	4.79	102,907	53,220	
United States of America	8	3,104,956	3,020,386	2.80	84,570	8	3,211,398	3,020,386	6.32	191,012	106,442	
TOTAL	54	40,714,017	38,419,315	5.97	2,294,702	51	40,714,017	38,419,315	5.97	2,294,702	0	

ANNEXES
(pages 65-68)

Information Table A													
TOTAL STAFF AND NON-STAFF BUDGET BY SECTION AND GROUP													
<i>(expressed in euros)</i>													
Section	Group	2014				2015				2014-2015			
		Staff Budget	Non-staff Budget	Group Total Budget	Section Total Budget	Staff Budget	Non-staff Budget	Group Total Budget	Section Total Budget	Staff Budget	Non-staff Budget	Group Total Budget	Section Total Budget
Appropriation Section 1: Governing and Scientific Councils													
GVG/SCI	GVG/SCI	0	90,000	90,000	90,000	0	90,000	90,000	90,000	0	180,000	180,000	180,000
Appropriation Section 2: Scientific Programme													
CIN	CIN	1,168,036	176,000	1,344,036	1,344,036	1,216,185	176,000	1,392,185	1,392,185	2,384,221	352,000	2,736,221	2,736,221
DIR	DIR	665,363	686,760	1,352,123	1,352,123	689,660	686,760	1,376,420	1,376,420	1,355,023	1,373,520	2,728,543	2,728,543
DIR Others	COM	892,121	144,560	1,036,681	2,646,556	943,341	144,560	1,087,901	2,746,719	1,835,462	289,120	2,124,582	5,393,275
	ETR	283,487	477,000	760,487		286,746	477,000	763,746		570,233	954,000	1,524,233	
	GHIS	0	130,000	130,000		0	130,000	130,000		0	260,000	260,000	
	LSB	491,572	227,816	719,388		528,888	236,184	765,072		1,020,460	464,000	1,484,460	
EDP	PRI	339,526	57,000	396,526	1,115,448	359,308	57,000	416,308	937,932	698,834	114,000	812,834	2,053,380
	QAS	242,453	87,400	329,853		108,225	6,600	114,825		350,678	94,000	444,678	
	SCR	327,069	62,000	389,069		344,799	62,000	406,799		671,868	124,000	795,868	
ENV	ENV	865,466	166,000	1,031,466	1,031,466	913,943	166,000	1,079,943	1,079,943	1,779,409	332,000	2,111,409	2,111,409
GEN	BST	157,925	27,000	184,925	1,717,307	167,526	27,000	194,526	1,798,566	325,451	54,000	379,451	3,515,873
	GCS	797,155	122,000	919,155		840,787	122,000	962,787		1,637,942	244,000	1,881,942	
	GEP	511,227	102,000	613,227		539,253	102,000	641,253		1,050,480	204,000	1,254,480	
IMO	IMO	868,407	93,500	961,907	961,907	919,434	93,500	1,012,934	1,012,934	1,787,841	187,000	1,974,841	1,974,841
INF	ICB	551,520	93,000	644,520	1,546,214	582,490	93,000	675,490	1,622,474	1,134,010	186,000	1,320,010	3,168,688
	ICE	808,194	93,500	901,694		854,484	92,500	946,984		1,662,678	186,000	1,848,678	
MCA	EGE	453,998	128,000	581,998	1,138,426	479,018	128,000	607,018	1,190,204	933,016	256,000	1,189,016	2,328,630
	MMB	468,428	88,000	556,428		495,186	88,000	583,186		963,614	176,000	1,139,614	
MPA	MPA	355,041	128,500	483,541	483,541	374,043	128,500	502,543	502,543	729,084	257,000	986,084	986,084
NME	BMA	532,524	62,000	594,524	1,658,129	562,530	62,000	624,530	1,719,602	1,095,054	124,000	1,219,054	3,377,731
	DEX	351,481	62,000	413,481		369,956	62,000	431,956		721,437	124,000	845,437	
	NEP	578,124	72,000	650,124		611,116	52,000	663,116		1,189,240	124,000	1,313,240	
SSR	ASO	0	899,500	899,500	899,500	0	899,500	899,500	899,500	0	1,799,000	1,799,000	1,799,000
Appropriation Section 3: Administrative Programme													
SSR	DAF	463,677	10,000	473,677	4,336,831	489,449	10,000	499,449	4,523,511	953,126	20,000	973,126	8,860,342
	HRO	468,135	6,000	474,135		492,811	6,000	498,811		960,946	12,000	972,946	
	ASO	1,064,753	717,600	1,782,353		1,115,615	717,600	1,833,215		2,180,368	1,435,200	3,615,568	
	BFO	1,046,416	3,000	1,049,416		1,103,739	3,000	1,106,739		2,150,155	6,000	2,156,155	
	ITS	496,750	60,500	557,250		524,797	60,500	585,297		1,021,547	121,000	1,142,547	
TOTAL		15,248,848	5,072,636	20,321,484	20,321,484	15,913,329	4,979,204	20,892,533	20,892,533	31,162,177	10,051,840	41,214,017	41,214,017

Information Table B	
ANNUAL INFLATION RATES IN FRANCE	
2002 TO 2011	
<u>Year ending 31 December</u>	<u>Annual Inflation Rate (%)</u>
2002	2.11
2003	1.60
2004	1.94
2005	1.63
2006	1.51
2007	2.53
2008	1.00
2009	0.82
2010	1.69
2011	2.40

Source: "Indices mensuels des prix à la consommation (Série hors tabac/Ensemble des ménages)" for 2002 to 2011 as published by the Institut National de la Statistique et des Etudes Economiques (INSEE).

Information Table C										
UNITED NATIONS ACCOUNTING RATES OF EXCHANGE: EURO TO US DOLLAR										
January 2004 to February 2013										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	0.801	0.737	0.845	0.760	0.686	0.730	0.693	0.761	0.774	0.754
February	0.804	0.765	0.827	0.771	0.676	0.762	0.714	0.734	0.763	0.737
March	0.804	0.757	0.844	0.755	0.661	0.782	0.741	0.728	0.746	
April	0.820	0.771	0.827	0.750	0.634	0.759	0.743	0.710	0.753	
May	0.844	0.773	0.791	0.732	0.642	0.744	0.774	0.675	0.755	
June	0.816	0.814	0.778	0.744	0.643	0.717	0.819	0.702	0.805	
July	0.821	0.829	0.796	0.740	0.636	0.711	0.811	0.699	0.804	
August	0.831	0.827	0.784	0.731	0.658	0.712	0.763	0.700	0.816	
September	0.831	0.820	0.780	0.734	0.698	0.695	0.787	0.688	0.797	
October	0.812	0.832	0.788	0.705	0.729	0.688	0.735	0.733	0.777	
November	0.786	0.840	0.786	0.694	0.773	0.676	0.720	0.707	0.772	
December	0.754	0.850	0.759	0.678	0.758	0.664	0.764	0.750	0.770	
Annual Average	0.810	0.801	0.800	0.733	0.683	0.720	0.755	0.716	0.778	
Biennial Average		0.806		0.767		0.701		0.735		
		2004/2005		2006/2007		2008/2009		2010/2011		
Budget 2004/2005 approved at 0.911 €/US\$			Budget 2008/2009 approved at 0.815 €/US\$			Budget 2012/2013 approved at 0.675 €/US\$				
Budget 2006/2007 approved at 0.815 €/US\$			Budget 2010/2011 approved at 0.660 €/US\$							

Information Table D						
GROUP CLASSIFICATION OF COUNTRIES AND ASSIGNING UNITS FOR ASSESSED CONTRIBUTIONS BASED ON CURRENT AND REVISED SCALES OF WHO						
GROUP CLASSIFICATION OF COUNTRIES AS PER RESOLUTION GC/15/R9						
WHO's % Contribution	IARC Group	IARC Scale (# units)				
8% and above	1	8				
4% and above; below 8%	2	4				
2% and above; below 4%	3	2				
0.5% and above; below 2%	4	1				
less than 0.5%	5	0				
GROUP AND UNITS ASSIGNED TO EACH PARTICIPATING STATE BASED ON CURRENT AND REVISED SCALES						
PARTICIPATING STATES	CURRENT SCALE for 2012-2013			REVISED SCALE for 2014-2015		
	WHO's % Contribution	IARC Group	IARC Scale (# units)	WHO's % Contribution	IARC Group	IARC Scale (# units)
AUSTRALIA	1.9331	4	1	2.0741	3	2
AUSTRIA	0.8511	4	1	0.7981	4	1
BELGIUM	1.0751	4	1	0.9981	4	1
CANADA	3.2072	3	2	2.9842	3	2
DENMARK	0.7361	4	1	0.6750	4	1
FINLAND	0.5660	4	1	0.5190	4	1
FRANCE	6.1234	2	4	5.5935	2	4
GERMANY	8.0186	1	8	7.1416	2	4
INDIA	0.5340	4	1	0.6660	4	1
IRELAND	0.4980	5	0	0.4180	5	0
ITALY	4.9994	2	4	4.4483	2	4
JAPAN	12.5309	1	8	10.8338	1	8
NETHERLANDS	1.8551	4	1	1.6541	4	1
NORWAY	0.8711	4	1	0.8511	4	1
REPUBLIC OF KOREA	2.2602	3	2	1.9941	4	1
RUSSIAN FEDERATION	1.6021	4	1	2.4382	3	2
SPAIN	3.1772	3	2	2.9732	3	2
SWEDEN	1.0641	4	1	0.9601	4	1
SWITZERLAND	1.1301	4	1	1.0471	4	1
TURKEY	0.6170	4	1	1.3281	4	1
UNITED KINGDOM	6.6045	2	4	5.1794	2	4
UNITED STATES OF AMERICA	22.0000	1	8	22.0000	1	8
TOTAL UNITS			54			51