

DEVELOPING FIG AGENDA 21

Helge ONSRUD

1. INTRODUCTION

In being asked to chair an activity to develop a FIG statement on sustainable development, the first draft is hereby presented. The current draft is prepared without consulting the other members of the appointed Task Force.

It has been my ambition that the statement should inform the UN, governments and others about the potential services of the surveying profession for sustainable development, and as well spell out a number of commitments for FIG and the surveying profession

In doing this I have (i) chosen to extract a number of statements of the Rio Agenda 21 and documents from subsequent UN conferences that are most relevant in respect to surveyors and the surveying profession, (ii) to explain the potential contribution of FIG and surveyors in implementing Agenda 21, and (III) finally to propose a set of concrete actions to be undertaken by FIG and it's member associations.

I have deliberately dealt only with the three main areas where surveyors can contribute to sustainable development, notably in land distribution and land registration, land use planning and management, and finally in geographic information for decision making, leaving out FIG activities that are more peripheral to sustainable development.

I have chosen to use a format that is well known within UN for such documents or statements.

Developing FIG into a true non-governmental organisation it is my opinion that FIG need to express a set of values for the contribution of the surveying profession in implementing sustainable development policies and actions. I hope this can trigger a good discussion.

I strongly underline that the current document is a first draft only, and that the final statement well may look very differently. As the document is structured, it seems urgent that the commissions are involved in the follow up, providing concrete proposals for amendments and inclusion of issues that are not included in the current draft. At least this should involve Commission 1, 2, 3, 7 and 8, in addition to the Bureau. The Task Force should then have the role of editing the inputs into a well composed document, to be discussed and finally agreed in Korea next year.

2. DRAFT FIG AGENDA 21

Agenda for implementing the concept of Sustainable Development in the activities of the International Federation of Surveyors and its member associations.

2.1 A World in Change

Almost all societies of the World are currently undergoing change at a pace never observed before. The World's population increased from less than 3 billion at the beginning of the last century, to pass 6 billion people at the start of the new millennium. Developing countries experience a massive migration to urban areas, where poor people are increasingly concentrated in slums and squatter settlements in ever-expanding cities. Since 1950 the global urban population has jumped from 750 million to more than 2500 million people. It is estimated that in developing countries 88 % of the population growth during the next 25 years will be in urban settlements. Within 30 years, two thirds of the World's population will live in cities. The urban growth is mostly informal and unplanned, often resulting in people settling in dangerous locations. Already half of the World's population live within 60 kilometres from the coastline, one-third of which is at high risk from degradation brought about by human activity.

In many countries fresh water availability is approaching crisis point. 1,3 billion people do not have access to clean water, and it is estimated that 5 million people die annually from diseases caused by water contamination.

Large areas of land for food production are lost annually to erosion and urban growth. The human induced depletion of the ozone layer and climate change may potentially cause major problems to health and settlements in many parts of the World.

The last thirty years have witnessed a growing understanding that the Earth cannot sustain the current levels of pollution and utilisation of natural resources, unless human behaviour and policies are radically changed. The pressure on the World's natural environment must be reduced.

At the same time 25 % of the World's population live in deep poverty. 1,3 billion people live on less than 1 USD per day, 2,6 billion people do not have access to basic sanitation. It is estimated that 3/4 of a billion people not receive enough food. 1 billion people living in urban areas lack access to adequate shelter, and more than 1 billion of the city dwellers are without secure tenure to house or land.

It has become widely recognised that the general change of societies, *the development*, in all parts of the World, must be oriented towards behaviours and actions that do not destroy the natural environment. Within this framework, it is generally agreed that the change in behaviour and actions, must be expressed in policies that simultaneously improve the living conditions for the poor peoples. Removing barriers that keep people in poverty is important for the protection of the environment, but also a human challenge and responsibility in itself.

Thus the World is faced with two major challenges; protecting the natural environment, and at the same time eradicating poverty.

2.2 Sustainable Development - a Policy for Change

Responding to the above challenges, the Governments of the World, at the United Nations 1992 Rio Conference on Environment and Development in 1992, commonly agreed on the concept of *Sustainable Development* as a general principle for policies and actions in a large number of fields and sectors of societies.

Sustainable Development can be defined as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*", as it was expressed by the World Commission on Environment and Development in their report on "Our Common Future"

Expressed in a more direct way, policies for Sustainable Development contains three pillars of equal importance:

- Protecting the natural environment
- Improving the social situation for the poor
- Combating poverty

The Rio Conference agreed a program for implementation of sustainable development in the twenty-first century, *Agenda 21*. Agenda 21 focuses, *inter alia*, on the strategic importance of integrated approach to the planning and management of land. It underlines the importance of making sustainable urban settlements, and for proper management of land for agriculture and rural development. It stresses the link between land management and the protection of biodiversity, forests and water resources. It underlines the need for reliable information for decision-making. It calls for or a stronger role of non-governmental organisations as partners for sustainable development. It calls for support from national governments, regional and local authorities, and from the non-governmental sector. They are all encouraged to formulate and adopt local agendas for their respective fields of responsibility.

Since that point of departure, a number of international events have deepened and widened the understanding of the profound importance to humanity of achieving sustainability. The report from the 1996 UN Conference on Sustainable Settlements (Habitat II) focuses, *inter alia*, on the fast growing cities in developing countries as a major challenge to master through proper planning and land management, as well as on access to land and security of tenure as engines for social and economic improvements. The World Food Summit (Rome 1996) underlined the importance of good management of land in providing food to the rapidly growing population of the World. The World Summit on Social development (Copenhagen 1995) and the World Women's Conference (Beijing 1995), refers, *inter alia*, to the importance of giving women, indigenous people and vulnerable groups equal access to land and security of tenure.

However, in spite of conferences and declarations, in many parts of the World developments have been to the worse. The need for a change towards sustainable development is larger than ever before. This is a challenge to all, to governments on all levels, to non-governmental organisations and to each individual, that be a professional or a common man.

2.3 Why FIG Agenda 21

FIG recognises that professions play an important role in implementing sustainable development. Dealing, inter alia, with planning and management of land and water resources, surveying and registration of real property, and with geographic information, that's indeed so for the surveying profession.

Even before Rio the International Federation of Surveyors' expressed its support to the concept of sustainability as a principle guideline for development of societies. At its annual meeting in Beijing in 1991 the organisation unanimously adopted the "FIG Statement on Sustainable Development - a Challenge and a Responsibility for Surveyors".

During the following decade FIG translated its support into a number of actions. Surveying and sustainable development has been in focus at the FIG congresses, annual meetings and commission gatherings. The collaboration with United Nations has been widened and deepened. During the UN Habitat II Conference in 1995 FIG organised, in collaboration with the United Nations Centre for Human Settlements one of the ten Habitat II Dialogues for the 21st Century. The Dialogue on Land and Rural-Urban Linkages provided valuable input to the Habitat Agenda. A joint UN-FIG meeting was held in Indonesia in 1996, resulting in the Bogor Declaration on Cadastral Reform: The collaboration between UN and FIG in promoting sustainable development was further developed in a workshop in Australia in 1999, which prepared the Bathurst Declaration on Land Administration for Sustainable Development, in the Memorandum of Understanding agreed with the United Nations Environment programme in 2000.

These and other events have widened the understanding of the current and potential contribution of the surveying profession to sustainable development, both inside the profession and within the related United Nations agencies. The aim of this statement is to present this understanding in a concentrated form to a wider circle of parties and persons, and to present a number of guiding principles for the implementation of sustainable development in FIG and within the surveying profession.

By adopting this FIG Agenda 21, FIG confirms its support for the concept of sustainable development, and renews its program for contribution to the implementation of sustainability in policies and actions on all levels of society.

3. FIG AGENDA 21

Chapter I

Preamble

1.1. We, the International Federation of Surveyors, recognise that the World is confronted with a growing disparity between and within nations, a worsening of poverty, hunger and ill health, and a continuing deterioration of the ecosystems on which humanity depends for its well-being. We recognise that the only path

forward to a better World for current and future generations is through integration of environment and development concerns. We understand that the concept of sustainable development is rooted on three pillars of equal importance:

- Protection the natural environment
- Improving the social situation for the poor
- Combating poverty

- 1.2 We recognise Agenda 21, adopted by the 1992 UN Conference on Environment and Development, as a foundation for plans, policies and actions for sustainable development. We acknowledge that other international conferences, including the UN Conference on Human Settlements (Habitat II 1996), the UN Food Summit (Rome 1996), the UN World Summit on Social Development (Copenhagen 1995) and the UN World Women's Conference (Beijing1995) also address important social, economic and environmental issues, including components of the sustainable development agenda, for which successful implementation depends on actions on local, national and international levels.
- 1.3 We recognise that sustainable development can only be achieved in a global partnership. Successful implementation of Agenda 21 is first and foremost is a responsibility of national Governments, supported by international co-operation, in particular by the system of United Nations. However, we note that Agenda 21 also calls upon the broadest public participation and the active involvement of non-governmental organisations. We fully share the opinion that non-governmental organisations, on local as well as on international level, can and should make a significant contribution in promoting and implementing sustainable development.
- 1.4 Exploitation and management of the World's natural resources are of crucial importance for sustainable development. In particular good management of land and water resources is a prerequisite in ensuring food for current and future generations and in protecting biodiversity. Proper planning and management of human settlements, both in urban and rural areas, are critical components in combating poverty, ill health and for improving the general social and economic situation for the poor.
- 1.5 It is widely recognised that access to land and security of tenure are of profound importance in improving the situation for the poor, who are frequently living in informal settlements without recognised rights to shelter or to land that can provide food for basic needs. The fast growing number of urban dwellers, in particular in non regularised settlements in developing countries, represents a tremendous challenge in combating poverty, ill health, unemployment and illiteracy. In addition to keeping people in poverty, unjust distribution of rights to land is still causing violence and war like situations in several developing countries show.
- 1.6 Plans, policies and actions for sustainable development depend on access to appropriate information. Issues concerning sustainable development are frequently of a spatial nature, and Chapter 40 of Agenda 21 reflects this in underlining the importance of access to geographic information. Mapping, aerial photography, remote sensing from satellites, and geographic information systems and related

communication technologies are powerful tools in raising public awareness and in helping decision makers on all levels.

- 1.7 Dealing with surveying, planning and management of land and water resources, laws and systems that is needed for access to land and security of tenure, and with geographic information in all its aspects, the profession of surveyors is deeply involved in issues of profound importance for sustainable development. The way surveyors are trained and act can have a significant impact on the implementation of sustainable development.
- 1.8 Organising surveyors from all over the World, The International Federation of Surveyors is committed to do its utmost to develop the surveying profession and the individual surveyor to act in accordance with the principles of sustainable development. Further to this, we are committed to collaborate with all relevant agencies of the United Nations and with other non-governmental organisations in developing a mutual understanding of how surveying in all its aspects, as well as related techniques, products and services, best can contribute to the implementation of Agenda 21 world-wide.
- 1.9 The Chapters below formulate principles and programmes to which the surveying profession should adhere to help implementing sustainable development. Chapter 2, 3 and 4 deal with the three main areas of activities where the profession concretely can contribute. Chapter 5 deals with developing the surveying profession to respond ethically and with professional competence to the challenge of Agenda 21. Chapter 6 is about how FIG internally will focus on sustainable development issues, and how the member associations can and should contribute. Chapter 7 is about how FIG will collaborate with the United Nations and with other non-governmental organisations in respect to sustainable development issues.

Chapter II

Access to Land and Security of Tenure

Basis for action

- 2.1 Land resources are the basis for human living, and provide soil, energy, water and the opportunity for all human activity. It is estimated that more than half the people in the developing countries are still effectively excluded from ownership or other types of secured right to land for shelter or for producing food to cover basic needs. It is generally agreed that lack of access to land and secured tenure severely hamper the social and economic development in these countries. Only few countries exhibit true land shortages, consequently it is the current distribution of land holdings that hamper development. On the other side, it can be observed that widespread and secured rights to real property is a communality among the richer nations of the World. *“Access to land and security of tenure are strategic prerequisites for the provision of shelter for all and for the development of sustainable human settlements affecting both urban and rural areas. It is also a way of breaking the vicious circle of poverty”*. (The Habitat Agenda paragraph 75)

- 2.2 Most developing countries experience a massive migration to cities, where the majority of the new urban dwellers settle in non-regularised areas, often in locations that are exposed to natural hazards, such as land slides and flooding, and to ill health, illiteracy and unemployment, thus effectively keeping them in poverty. However this mainly results from inadequate policies and actions from the government, lack of secure tenure discourages residents from improving the conditions through own investments in houses and in common services for water, sewage, roads, etc. In former socialist countries in Europe regularisation of rights to flats is of major concern to avoid a colossal problem in the housing sector, because as many as 80 - 90 percent of the population in these countries are living in multifamily, panel-block type of buildings.
- 2.3 In many countries, particularly in the developing world, the main proportion of land is owned by a small percentage of the population, whilst large numbers of inhabitants are landless poor.
- 2.4 In every continent there are people whose customary rights to land and natural resources have been ignored. In many countries with indigenous peoples, their rights to own, possess or use land are still not properly recognised.
- 2.5 In many countries, in particular developing countries, legal, cultural and social barriers prevent women and other vulnerable groups from having equal and equitable access to land.
- 2.6 In addition to national policies for fair and equitable distribution of land, security of tenure requires appropriate institutions, i.e. legislation, registration systems and organisations. It is observed that in many countries the current tenure and cadastral infrastructure do not render adequate and reliable services to all, either that results from high costs, slow procedures, inadequate technical requirements, lack of co-operation between ministries and agencies, or to corruption. It is noticed that field surveying of boundaries with very high geodetic precision, is a critical cost element in developing a cadastre, and that viable land markets can be facilitated without accurate property maps. Both former socialist countries which are re-establishing private ownership, and developing countries which are introducing private ownership and related institutions for the first time, are faced with these problems. In the latter group of countries the issues of customary land tenure and of land grabbing, are frequently not adequately addressed.
- 2.7 Agenda 21 and the Habitat Agenda underline the close link between access to land and security of tenure and sustainable development. Both documents provide concrete programmes for related actions to be taken by governments, private sector and non-governmental organisations. In Agenda 21 Chapter 7 on Promoting sustainable human settlements, and Chapter 14 on Promoting sustainable agriculture and rural development, are particularly relevant in this respect. From the Habitat Agenda it is referred to Chapter IV, Global Plan of Action, section B on Adequate shelter for all, in particular to the paragraphs 75 and 76, as well as to paragraph 40 of Chapter III, Commitments.

2.8 FIG has for a number of years collaborated closely with the United Nations in raising awareness and in developing recommendations and guidelines concerning the issues of access to land and security of tenure. References are made to the Bogor Declaration (1996) and the Bathurst Declaration (1999). Reference is also made to the FIG publication "Cadastre 2014", prepared under the supervision of FIG Commission 7.

Actions

2.9 To accelerate access to land and security of tenure as instruments for sustainable development, FIG will particularly:

- (a) Enhance the knowledge of, and access to, the property related principles and policies of Agenda 21 and subsequent international agreements, including those developed in co-operation between United Nations and FIG, and actively promote the application of these principles and policies throughout the surveying profession.
- (b) Promote fairness and equity in access to land and to the infrastructure which provides security of tenure, including promoting that women and indigenous people should have equal rights to possess, buy, inherit and use land. Nobody should be excluded from these rights on the basis of sex, religion or race.
- (c) Continue to assist in developing international guidelines and models for land related legislation and registration systems, including surveying and mapping that are responding to current and local needs.
- (d) Promote the understanding that current western type land registration systems need to be re-engineered to accommodate other forms of information which may not be parcel based, inter alia to facilitate the collection of information about tenure forms such as occupancy claims, use rights, water rights and overlapping rights.
- (e) Underline the need to develop practically working and low cost registration systems which facilitate the recognition of housing rights and other rights to land in informal settlements, including registration of co-operative forms of tenure for social housing.
- (f) Underline that emerging registration systems, in particular in developing countries and in transition economies, should not be overloaded with registering more data than needed to meet urgent needs, which normally are to secure tenure, facilitate selling and buying of land and to facilitate the use of real property as security for loans.
- (g) Recommend, in particular to the surveying profession, that standards for geodetic precision in boundary documentation in countries which shall undertake massive registration, should not exceed serving basic needs. In several countries it has been demonstrated that overview maps (index maps), without detailed field surveying, are fully satisfactory for an emerging land market.
- (h) Underline the importance of respecting local cultures and traditions in developing systems for registration of rights to land. Legislation and systems should, wherever relevant, facilitate that title can be granted to groups or families as well as to individuals.

- (i) Underline that implementing modern land registration systems must be coupled with policies and practical instruments that prevent land grabbing, which can otherwise be the result in economies where only a rich minority have resources to buy land.
- (j) Underline that the demand for formal land tenure should come from the people in the area, and that the local inhabitants as well as the local authorities should take active parts in the related processes.

Chapter III

Planning and Management of Land

Basis for action

- 3.1 Migration to urban areas, the sprawl of cities into wider geographical areas, and the rapid growth of mega-cities, in particular in developing countries, are among the most significant transformations of human settlements. Many cities are witnessing harmful patterns of growth, of land use and of energy consumption, often resulting in serious pollution of soil, water and air, loss of valuable agricultural land and of land that sustains biodiversity. Frequently open and green spaces are not set aside for human well being. Urban settlements hold on the other hand a promise for human development through their ability to support large numbers of people while limiting their impact on the natural environment.
- 3.2 Following the massive migration to cities, developing countries experience establishment of large informal settlements. Lack of appropriate up-front planning and investments in infrastructure result in settlements only seldom serviced with water, sanitation, transport, schools, etc., frequently causing serious health problems, unemployment, illiteracy and crime.
- 3.3 Sustainable development at large depend on a balanced development of both urban and rural settlements. Urban and rural areas are interdependent economically, socially and environmentally. Ensuring appropriate urban-rural linkages are of vital importance for making sustainable cities as well as sustainable rural settlements. Rural settlements need to be valued and supported with improved infrastructure and services.
- 3.4 In many countries large areas of arable land are continuously lost due to change in land use that leads to massive erosion. In other areas uncontrolled clearing of forest frequently result in land slides, floods, and loss of vegetation which the biodiversity depend on.
- 3.5 In many areas critical fresh water resources are polluted from harmful effects of human settlements, not respecting the close connection between land use and the quality of ground water as well as of surface water.
- 3.6 Good land use planning and management of land can reduce many of the above problems. However the environmental impacts are not always appropriately assessed by politicians, planners and developers. Furthermore the implementation

of zoning plans and regulations are not always appropriately monitored and enforced.

3.7 Agenda 21 Chapter 7 sets out a program for the development of sustainable human settlements, including program elements for (Chapter 7 point 7.5):

- a) Providing adequate shelter for all
- b) Improving human settlement management
- c) Promoting sustainable land use planning and management
- d) Promoting the integrated provision of environmental infrastructure; water, sanitation, drainage, and solid-waste management
- e) Promoting sustainable energy and transport systems in human settlements
- f) Promoting human settlement planning and management in disaster-prone areas
- g) Promoting sustainable construction industry activities
- h) Promoting human resource development and capacity-building for human settlement development

Chapter 10 of Agenda 21 outlines a programme for Integrated Approach to the Planning and Management of Land Resources, taking into consideration both environmental, social and economic issues. The broad objective of the programme is to facilitate allocation of land to the uses that provide the greatest sustainable benefits and to promote the transition to integrated management of land resources. In more specific terms, the objectives are (Chapter 10 point 10.5):

- a) To develop policies to support the best possible use of land and the sustainable management of land resources
- b) To improve and strengthen planning, management and evaluation systems for land and land resources
- c) To strengthen institutions and coordinating mechanisms for land and land resources
- d) To create mechanisms to facilitate the active involvement and participation of all concerned, particularly communities and people at local level, in decision-making on land use and management

3.8 The Habitat II conference Istanbul 1996 agreed on a large number of principles, commitments and strategies for developing sustainable settlements, of vital importance for land use planning and management, whether executed by national or by local governments. Among these are (extract from Habitat Global Plan of Action, point 113):

- a) Establish appropriate legal frameworks for public plans and policies for sustainable urban developments and rehabilitation, land utilisation, housing and management of urban growth
- b) Promote efficient and accessible land markets that respond to community needs
- c) Develop, where appropriate, fiscal incentives and land control measures, including land-use planning solutions for more rational and sustainable use of limited land resources

- d) Encourage partnerships among public, private and voluntary groups and other interested parties in managing land resources
- e) Promote urban planning, housing and industrial siting initiatives that discourage the siting of hazardous industrial facilities in residential areas, including areas inhabited by people living in poverty or those belonging to vulnerable and disadvantaged groups
- f) Develop and support land management practises that take into account the need for everyday activities – for playgrounds, parks, sports and recreation areas and areas for gardening and urban agriculture
- g) Promote the integration of land use, communications and transport planning to reduce the demand for transport
- h) Develop and implement integrated coastal zone management plans to ensure proper development and conservation of coastal resources
- i) Institutionalise a participatory approach by developing and supporting strategies and mechanisms that encourage open and inclusive dialogue among all interested parties, with special attention to the needs and priorities of women, minorities, children, youth, people with disabilities, older persons and persons living in poverty and exclusion.

Actions

3.9 To promote best practises in land use planning and land management for sustainable settlements and for management of land resources in general, FIG will particularly:

- (a) Enhance the knowledge about of the principles, commitments and strategies for sustainable land use expressed in Agenda 21 and Habitat Global Plan of Action among the members of the Federation, and throughout the surveying profession
- (b) Actively promote the application of these principles and strategies among surveyors working in public as well as in private sector, inter alia, by transforming the principles and strategies into guidelines and models for practical use in planning and land management, including mechanisms and systems for monitoring and reporting on changes in land use.
- (c) Particularly promote the understanding of the importance of up-front planning and appropriate land management for making sustainable settlements for all those low-income groups migrating to cities in the developing countries, to ensure a minimum standard for water, sanitation, drainage, and solid-waste treatment.
- (d) Particularly also promote the understanding of the utmost importance of protecting fresh water resources through appropriate siting of settlements and harmful human activities, and in management of reservoirs and water catchment areas.
- (e) Promote that planners and land managers should insist on integrated approach to planning and land management, where environmental as well as social and economic factors are taken into account
- (f) Promote that surveyors in planning should demand environmental impact assessments as part of planning processes whenever and wherever appropriate

- (g) Promote that surveyors in planning and land management should insist on applying processes that actively involve all interested parties, including women, children, older people and peoples living in poverty.

Chapter IV

Geographic Information for Decision Making

Basis for action

- 4.1 Good decisions for sustainable development depends on access to reliable and relevant information, and to a very large extent on information that are geographically referenced. The need for geographic information arises on all levels of government, from senior decision-makers to the grassroots and individual levels.
- 4.2 Considerable data exist, but access to data is often hampered by lack of standardisation, coherence and of adequate services for data retrieval, including information about what data exist and where data are kept.
- 4.3 There is an increasing gap between developed and developing countries in their capacities to collect and disseminate geographic information, seriously impairing the capacities of countries to make sound decisions concerning environment and development.
- 4.4 The very rapid development of technologies and methods in surveying and mapping, such as integrated geographic information systems, remote sensing, satellite positioning systems and digital networks for sharing and dissemination of data, provides a very strong and important tool for decision making for sustainable development. Accessible and relevant geographic information will play an important role in both planning, execution and monitoring of development. Developing countries have embarked on implementing spatial infrastructures for optimal sharing and use of geographic data in digital form. The majority of developing countries lack however the capacity to utilise the emerging technologies and methods.
- 4.5 The recent extension of the United Nations Convention on the Law of the Sea (UNCLOS) for nations to get territorial rights over vast ocean areas, requires on the one hand national capacities to collect hydrographic and other data needed for presenting claims, and on the other hand a capacity to manage the areas. There is a very real need to ensure that these resources are entered into the national land information systems.

Activities

- 4.6 To facilitate the optimum use of geographic information in decision making for sustainable development, FIG will particularly:
 - (a) Help in the collection and dissemination about research, developments and best practises in the application of geographic information systems and

spatial data infrastructures, as well as in the use of surveying and mapping for environmental protection, planning and monitoring, and for social and economic development.

- (b) Assist in keeping relevant UN agencies and other international bodies informed about developments in the use of all aspects of geographic information for sustainable development
- (c) Promote the understanding that access to relevant geographic information is a democratic right, and support a policy that nobody, particularly local communities, grassroots movements, people in poverty or any other vulnerable groups should be denied access by law, high prices or by any other unreasonable means.
- (d) Promote that Internet can substantially improve the value of geographic information to involved parties on all levels of society, and that governmental agencies and private institutions holding such information should facilitate access for all.
- (e) Promote that countries as well as agencies within countries and regions should facilitate sharing of geographic data to help realising integrated approaches to planning and management of land, settlements, coastal areas and the oceans.
- (f) Promote that governments, agencies and institutions should document and share information about the sources of available information in their respective organisations.

Chapter V

Developing the Surveying Profession

Basis for action

- 5.1 Surveyors on all levels of government as well as in private enterprises, dealing with land and property, land use planning and management, and with geographic information, play an important role in developing and implementing policies, strategies and services of vital importance to sustainable development.
- 5.2 The way surveyors act, that be in positions in public or in private sector, may have a significant impact on the way societies develop towards sustainability.
- 5.3 Though the concept of sustainable development is generally known among most surveyors, the practical implications, the challenges and the responsibilities facing the surveying profession and the individual surveyor needs to be elaborated and supported, and continuously updated.

Actions

- 5.4 FIG is committed to do it's outmost to assist in developing the surveying profession to respond to the challenges and responsibilities of sustainable development. FIG will particularly:

- (a) Continue to include all aspects of sustainable development and its relations to the surveying profession in the technical programme at FIG congresses, conferences, workshops and meetings, including those arranged by the individual FIG Commissions.
- (b) Assist in developing university programmes for the general education of surveyors, that reflect their role and responsibilities in respect to sustainable development
- (c) Promote that national programmes for continuous profession development should include appropriate elements on sustainable development policies and strategies in relation to the activities of the surveying profession
- (d) Ensure that any FIG evaluation and rating of educational programmes, or similar activities undertaken by its subsidiary bodies, duly consider that all relevant aspects of sustainable development are adequately addressed.
- (e) Promote that national associations include appropriate attention to sustainable development in their national surveyors code of conduct. Support that these codes, *inter alia*, should request surveyors to facilitate equal access to land registration services, request that surveyors should insist on integrated approaches to planning and land management, request that environmental impact assessments should be executed whenever and wherever relevant, and request that all interested parties should be actively involved in relevant planning and development processes, and be granted access to all relevant data.

Chapter VI

Committing FIG and its member associations

Basis for action

- 6.1 Agenda 21 calls for the support of non-governmental organisations on all levels to support the implementation of sustainable development policies;
- 6.2 FIG recognises that professional associations, on international as well as on national level, can play an important role in implementing Agenda 21.
- 6.3 FIG recognises that developing the Federation into a real non governmental organisation, it should agree on a program that actively supports the implementation of sustainable development, and formulate a set of values which the Federation urges its member associations, associate members, academic members and individual surveyors to adhere to.
- 6.4 Reference is made to FIG publication no.3, 1991 “Sustainable development – a Challenge and a Responsibility for Surveyors”, which focused on the potential for surveyors to contribute to sustainable development, and committed the Federation to include environmental issues as an important topic at conferences and other occasions, and encourage national associations to do likewise.

Actions

- 6.5 By adopting this statement, The International Federation of Surveyors renews its commitment to promote the concept of sustainable development and the related challenges and responsibilities to surveyors in all its relevant activities. FIG is committed to:
- (a) Underline the wider understanding of sustainable development to include policies, strategies and actions for social and economic development as well as for environmental protection.
 - (b) Continue to include topics of sustainable developments policies, strategies and actions in all relevant activities of the Federation, as well as in the activities of the 9 FIG Commissions, and promote that the national member associations do likewise in their activities.
 - (c) Strive at building appropriate responds to the challenges and responsibilities of Agenda 21 to the surveying profession and to the individual surveyor, into guidelines, statements and other documents whenever relevant
 - (d) Ensure that concrete activities in relation to implementing FIG Agenda 21 are formulated in the long and short term work plans of the Federation
 - (e) Ensure that progress on activities in relation to sustainable development are regularly reported to the annual General Assembly of the Federation, including those undertaken by the Commissions and by the national associations.

Chapter VII

Collaboration with United Nations, national governments and non governmental organisations

Basis for action

- 7.1 Agenda 21 (para 27.9) urges all agencies of the United Nations system to establish mechanisms and procedures to draw on the expertise and views of non-governmental organisations in policy and programme design, implementation and evaluation.
- 7.2 Agenda 21 (para 27.10) further urges Governments to establish or enhance an exiting dialogue with non-governmental organisations
- 7.3 Since the adoption of Agenda 21, the issue of land administration for sustainable development has come to the forefront of the programmes of several UN agencies implementing Agenda 21, in particular through the UNCHS Global Action for Access to Land and Security of Tenure, and in the programme of the Commission for sustainable development. Similar initiatives are observed within regional activities of the United Nations system, and in other international and national organisations dealing with aid, environment and development.
- 7.4 Following the collapse of socialist regimes in East and Central Europe and in other regions of the World, transition countries have embarked on large programmes to

re-establish property rights and registration systems, as well as institutions for land use planning and management needed for market based economies to work properly. However, assistance in developing appropriate solutions and models are still very much needed.

7.5 FIG has during the last decade (1990 –2000) greatly widened it's collaboration with various agencies of the United Nations system, notably in chairing the dialogue on urban-rural linkages during the 1996 UN Conference on Human settlements, in preparing the two UN-FIG declarations on cadastral reforms (Bogor 1996) and on Land Administration for Sustainable Development (Bathurst 1999), in preparing a statement for co-operation between FIG and the UN-Agencies as a result of a FIG/UN roundtable (Melbourne 1999), and in entering into a Memorandum of Understanding with UNEP (Nairobi 2000).

7.6 FIG has as well established relations to other international associations, notably to the International Council for Research in Building and Construction (CIB) and to the Real Estate Federation (FIABCI), in developing strategies for working with sustainable development issues on the level of international non-governmental organisations.

Actions

7.7. FIG is committed to further develop its links to relevant UN agencies, national governments and non-governmental organisations. In this FIG will:

- (a) Channel information about relevant UN programmes and activities to FIG member associations and to the individual surveyors
- (b) Help UN agencies in developing sound strategies and policies for using the competence and services of the surveying profession in implementing sustainable development, when and where the advice of the surveying profession is relevant.
- (c) Collaborate with UN agencies in developing guidelines targeted at the surveying profession to optimise the profession's contribution in implementing sustainable development on all levels of society
- (d) Collaborate with the various UN agencies in developing guidelines and practical models for developing national surveying capacities to assist in implementing sustainable development on national, regional and local level.
- (e) Participate actively as a non-governmental organisation representing the global surveying profession in relevant UN meetings where NGOs are invited to contribute.
- (f) Establish collaborative arrangements with international non-governmental organisations, and non commercial institutions that are involved in implementing Agenda 21, and which will benefit from sharing the knowledge developed in FIG concerning sustainable development, and from the services of the surveying profession
- (g) Establish or further develop existing links to other international non-governmental organisations dealing with tangible issues, to enhance the contribution towards sustainable development through concerted action.

- (h) Promote that the member associations establish proper links to relevant bodies of their domestic government to enhance the input from the surveying profession in implementing Agenda 21 on national level.

CONTACT

Helge Onsrud
Chairman of FIG Task Force on Sustainable Development
Senior Advisor
National Mapping Authority of Norway
Statens kartverk
P.O.Box 8120
Dep 0032
Oslo
NORWAY
Tel: + 47 22 99 10 36
E-mail: helge.onsrud@statkart.no