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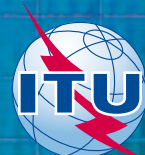
HRD/HRM Survey

ON CURRENT AND FUTURE NEEDS AND PRIORITIES IN A CONVERGED, COMPETITIVE TELECOMMUNICATION/ ICT ENVIRONMENT

ITU - D Analysis Report - October 2008



HUMAN CAPACITY BUILDING DIVISION



International
Telecommunication
Union

HRD/HRM Survey

**on current and future needs and
priorities in a converged, competitive
telecommunication/ICT environment**

ITU-D Analysis Report

October 2008

**Working Group on Human Resources Development (WGHRD)
Human Capacity Building Division (HCB)
Telecommunication Development Bureau (ITU-D)**

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1 FOREWORD

The Working Group on Human Resources Development (WGHRD) was formed as a result of Resolution 40, adopted at the World Telecommunication Development Conference (Doha, 2006). The Conference instructed the Telecommunication Development Advisory Group (TDAG) to create a working group to assist the Telecommunication Development Bureau (BDT) to enhance the scope of its human resources development activities as well as to coordinate the actions specified in the mentioned resolution relating to the BDT programme on human resources development, taking into consideration related issues in the Geneva Plan and Tunis Agenda of the World Summit on the Information Society (WSIS). The terms of reference for the WGHRD were approved at the 12th meeting of TDAG, in 2007.

The WGHRD held its first meeting in February 2008, during which it approved an Action Plan for 2008. The Action Plan included the gathering of data through a Questionnaire about current and future human resource development/human resource management (HRD/HRM) needs and priorities, which will be used as a basis for WGHRD to advise TDAG.

The text of the Questionnaire was discussed and approved for circulation during the second meeting of the WGHRD, held on the sidelines of the Global Symposium on Human Capital Development in Coventry, United Kingdom, from 21 to 25 July 2008.

Thirty top executives and HR directors/managers from 26 countries were surveyed from 18 August to 15 October 2008.

Because of the relatively small size of the sample, it has not been possible to apply full statistical tools to this analysis. Nevertheless, this study gives a good insight as to the awareness and level of HRD/HRM current and future needs and priorities in a converged, competitive telecommunication/ICT environment in the participating countries.

The WGHRD wishes to acknowledge the support of all individuals and organizations who contributed to the preparation of the questionnaire, responses and this analysis report. We would also like to acknowledge the support of the Telecommunication Development Sector (ITU-D), BDT and the Human Capacity Building Division of ITU (HCB), which made this survey possible.

Special thanks should also go to the ITU publications production and quality control units for their layout and editorial work.

2 EXECUTIVE SUMMARY

Objectives of the survey:

- Define HRD/HRM current and future needs and priorities in a converged, competitive telecommunication/ICT environment.
- Assess the readiness of the HR function to meet the current and future human resources challenges of the information society.
- Develop recommendations on how ITU/BDT, and in particular the HCB Division, can assist countries to bridge any readiness gaps existing within their HR function.
- Thirty top executives and HR directors/managers from six regions, and 26 countries were surveyed between 18 August and 15 October 2008 (pages 6-7).
- The responses addressed five main areas of the survey, namely:
 - Organizations and the HR function
 - HR's role and new challenges
 - Human capital development
 - Building the information society
 - ITU-D human capacity building

Organizations and the HR function

- The surveyed organizations were from administrations of ITU Member States (10 per cent), regulators (47 per cent) and Sector Members of ITU (43 per cent) worldwide (page 8).
- In 67 per cent of respondent organizations, the HR function has been increased in scope and responsibilities over the last three years. In many organizations, the HR function has been separated from the administrative function, and special units have been created for human resource development, as well as for implementing performance management systems. The survey findings show an increasing role of the HR function in strategy formulation in a majority of organizations, which is in keeping with the global trends of HR as a “Business Partner” (page 9).

HR's role and new challenges

- Fifty per cent of respondent organizations mentioned the primary role of the HR function as being more strategic, i.e. helping to achieve organizational objectives (page 9).
- The three key issues expected to pose a challenge three years from now are managing change, organizational development, creativity and innovation (page 9).
- To meet the above-mentioned challenges, the surveyed organizations foresee the need of training, learning best practices and using HR measures. Most organizations are committed to staff development and view training as investment rather than a cost (page 10).
- The most important areas of HR training needs over the next three years are strategic human resources management, management of talent and competencies, performance improvement, performance management and pay policy (page 11).

Human capital development

- Fifty-nine per cent of the participants explained their contribution as assisting in ongoing education, training and development of personnel, 31 per cent have connected the HR function contribution to the HR strategic role, meaning that HR professionals should take advantage of becoming more strategic and of developing into true business partners, aligning human capital interventions with

future business objectives, through HR capacity building and development, and closing the performance gap (page 11).

- The respondents stated that the priorities for human capital development are strategic skills/competencies (90 per cent), leadership (87 per cent), culture/strategic awareness (73 per cent) (page 12).
- Fifty-seven per cent mentioned, as challenges, the shortage of strategic skills/competencies facing the ICT sector today, shortages of managerial skills in a competitive environment of accelerated convergence. Other areas of skills shortage are: policy and regulation; introduction of new services; marketing and customer orientation; innovation and creativity of products and services; ICT applications; technology trends; strategic HR management, etc. Some 23 per cent were more specific, depending upon the type of their organizations. Policy-makers stressed ICT skills gaps such as: ICT skills for the effective implementation of e-governance policy and the development of the information society (pages 12-13).
- Sixty-seven per cent of participants, in the context of an organization's strategy on the necessary ICT professional skills for strategy implementation, mentioned skills in next-generation networks (NGN); policy and regulation in a converged environment; project management; skills in business process management (BPM); ICT; skills in digital broadcasting planning; dealing with ITU notices on satellite issues; skills in emerging telecommunication policy and regulatory issues, etc. (page 13).
- Fifty per cent of the participants stated that there exist national mechanisms supporting the development and implementation of a long-term and consistent ICT skills agenda in close cooperation between the public and private sectors (page 15).

Building the information society

- Twenty-seven per cent of participants stated that they have a national strategy for WSIS implementation, and 60 per cent have a national e-strategy (page 17).
- The lack of awareness of the existence of a national ICT strategy for WSIS implementation within countries is cause for concern (60 per cent) given that the success of any ICT strategy requires planning for the necessary human capacity to make it happen and effective. Despite this low awareness, there is a high awareness of national e-strategies (60 per cent), meaning that perhaps we do not have a holistic application of an ICT policy in some of these countries (page 17).
- From the WSIS action lines C2 (Information and communication infrastructure) and C5 (Building confidence and security in use of ICTs), where ITU is facilitator, 60 per cent of the participants and 40 per cent of the participants, respectively, mentioned relevance to their national strategy. For action line C4 (Capacity building), where ITU is co-facilitator with UNDP and UNESCO, 47 per cent of the participants mentioned relevance to their national strategy. This raises the need for the creation of comprehensive processes of communication, education and training (pages 17-18).
- According to the respondents, ITU-D/HCB can assist organizations' human capacity development in the contribution to national e-strategy implementation through continuous training and skills development, sharing of best practices and success stories, establishment of a networking platform, through awareness of the importance of ICTs at government level, benchmarking and study groups (page 18).

ITU-D human capacity building

- A majority (90 per cent) of the respondents consider that ITU-D/HCB's contribution is most valuable to their organizations in the following areas: regulatory issues (72 per cent), HR management (55 per cent), technology awareness (55 per cent) (page 18).
- The respondents mentioned the areas where ITU-D/HCB's contribution could be valuable to meet organizations' HCD needs: converging networks (technical and regulatory aspects); cybersecurity

and cyberattacks; e-services; information and communication infrastructure; HRM/HRD; knowledge management, training of trainers; management of talent and competencies; IP awareness; business management; rural connectivity; economics and finance (page 19).

- Only 59 per cent of participants have access to the ITU-D human capacity building website (page 20).
- The following percentages of respondents are acquainted with the ITU-D human capacity building five major tasks: transfer of knowledge (59 per cent), sharing experience and know-how (48 per cent), assistance to strengthen the human resource and training functions (55 per cent), dissemination of information (43 per cent), human capacity building special initiatives (38 per cent) (page 20).
- The following percentages of respondents are acquainted with ITU-D human capacity building special initiatives: CoE – Centres of Excellence (41 per cent), TOT – Technical Assistance Programme for Developing Countries (21 per cent), ITCI – Internet Training Centres Initiative (10 per cent), e-Community Learning and Information Centres (7 per cent), ITU e-Learning Platform (41 per cent) (page 20).
- Most of those participants who had not participated in ITU-D online workshops gave as a reason the lack of information due to time and only a few gave the reason of poor Internet connection within their organizations (page 20).
- The participants expected support from ITU-D through the following: more information about the ITU-D function; better communication; fellowship or sponsorships; in-house training; communicating about new courses and promoting internships; developing customized training courses according to their needs; providing information on time; e-learning activities organized by ITU free-of-charge for public administrations; study leading to a qualification, which could be used in the future (page 21).
- The participants expected support from ITU-D in order to achieve their HRD/HRM goals: to assist in transforming HR into strategic HR; training on managerial skills and sharing HR initiatives around within the telecom sector; the development of regional networks of human resources managers, especially among governmental organizations; the establishment of regional networks of technical, strategic and financial managers and professionals, especially of governmental organizations; consulting, granting of information resources; study of advanced experience in this area; providing information concerning present-day HR technologies; free admission to training sessions and access to the e-library. ITU-D should act as a bridge to consultants and experts (page 21).
- Seventy-four per cent of the participants supported the idea of establishing regional networks of HR managers to better respond to the evolving human capacity development trends and to discuss common-interest topics (page 21).

3 SURVEY DESIGN

Target groups: administrations of ITU Member States, regulators and ITU-D Sector Members worldwide

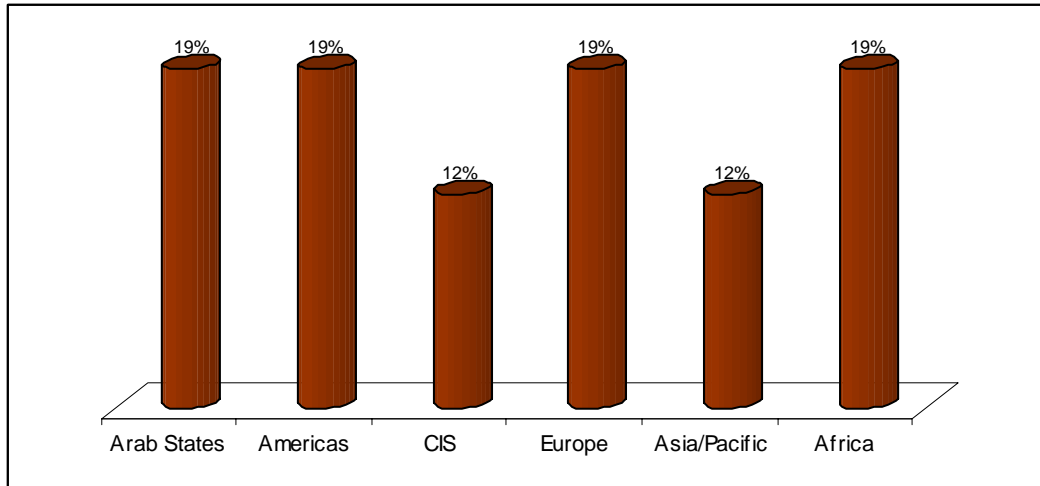
Survey methodology: questionnaires were completed online or returned by e-mail or fax

Sample: thirty organizations from target groups

Survey period: 18 August to 15 October 2008

4 DEMOGRAPHICS

Figure 4.1: Regional participation by country

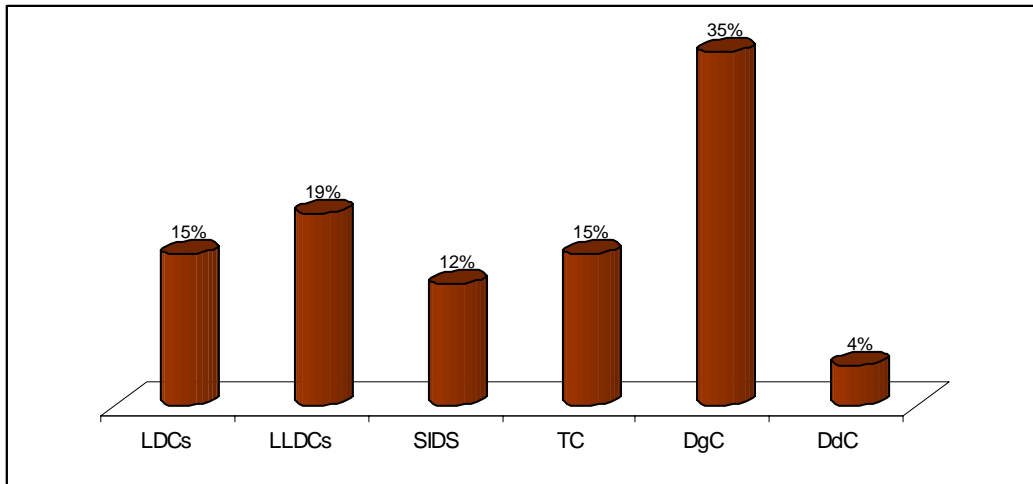


The list of participating countries by region is provided in Annex 1.

Participating countries by development level

Development level	Number of countries
Least developed countries (LDCs)	4
Landlocked developing countries (LLDCs)	5
Small island developing states (SIDS)	3
Countries with economies in transition (TC)	4
Developed countries (DdC)	1
Developing countries (DgC)	9

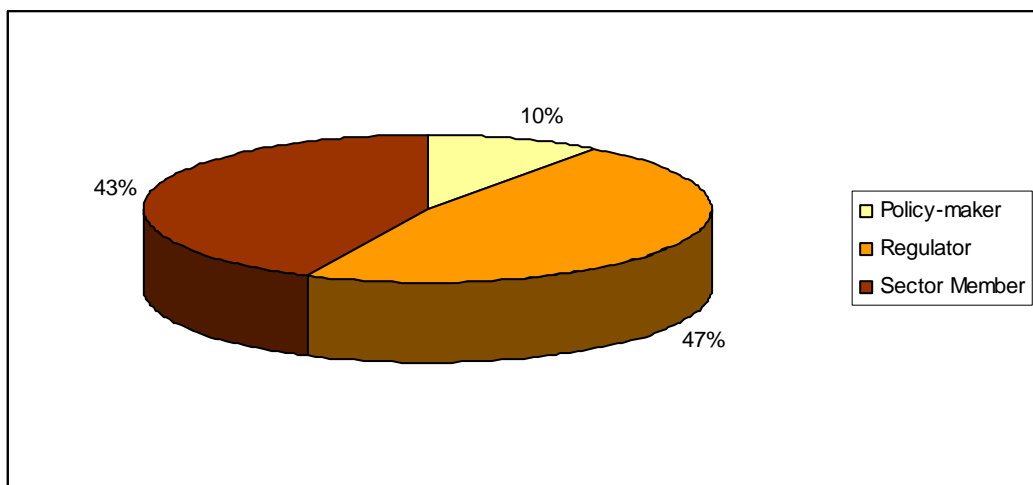
Figure 4.2: Participating countries by development level



Participating organizations by type

Organizations' type	Number of organizations
Policy-makers	3
Regulators	14
Sector Members	13

Figure 4.3: Participating organizations by type



The list of participating organizations by country and by region is provided in Annex 2.

5 ANALYSIS OF THE SURVEY

The responses addressed five main areas of the survey, namely:

- Organization and the HR function
- Role of HR and new challenges
- Human capital development
- Building the information society
- ITU-D human capacity building

5.1 Organization and the HR function

5.1.1 Participating organizations

Forty-seven per cent of respondent organizations were regulators, 43 per cent were Sector Members and only 10 per cent were policy-makers. The higher participation rate of regulators may be explained by their active collaboration with ITU-D.

5.1.2 Number of employees

A breakdown of the surveyed organizations by number of employees is presented in the table below:

Table I: Breakdown of the number of employees by participating organization

Number of employees	Organizations in %
1-49	23
50-99	7
100-499	40
500-999	10
1 000-10 000	13
>10 000	7

5.1.3 Number of employees in the HR function

The number of employees assigned to the HR function within the above-mentioned organizations varied from less than 1 per cent to 10 per cent of the total number of employees, depending on the size of the companies and role of HR in those companies.

5.1.4 Scope and structure of the HR function

In 67 per cent of the respondent organizations, the HR function has been increased in scope and responsibilities over the last three years and only in 60 per cent has the HR function changed its structure over the same period. In many organizations, the HR function has been separated from the administrative function, and special units have been created for human resource development as well as for the implementation of a performance management system.

5.1.5 HRM/HRD strategy

Over 60 per cent of the surveyed organizations have a mission statement, business strategy and an HRM/HRD strategy. Thirty-seven per cent of the organizations have only a mission statement and business strategy, and 3 per cent have neither.

According to the surveyed organizations, the HR function is involved in the development of their business strategy:

from the outset, as part of the strategy formulation process	(53 per cent)
through subsequent consultation	(23 per cent)
at the implementation stage, as key leader	(10 per cent)
is not involved at all	(14 per cent)

Thirty-one per cent of the Sector Members are part of a larger group of companies, where HR policies are partially determined at headquarters level.

The survey findings indicate an increasing role of the HR function in strategy formulation in most of the surveyed organizations, which is in keeping with the global trends of HR as a business partner.

5.2 Role of HR and new challenges

5.2.1 The primary role of HR in organizations

Fifty per cent of the respondent organizations mentioned the primary role of the HR function as being strategic: i.e. helping to achieve the organization’s objectives.

A few quotes from responses to the survey:

“The role of HR shifted recently from an administrative role to a strategic level. While sustaining a strong legal compliance and accurate administration in employment issues, classical HRM functions and processes were introduced successfully. Also, HR became a primary agent for change in the organization and an internal strategic consultant for the top management in organizational matters. Running the Organizational Culture Development Program, HR has the influence to trigger modernization throughout the organization.”

Hungary/National Communications Authority, Hungary

“To coordinate global talent management practices; to drive culture of innovation; to develop employee engagement; to develop critical future skill and capabilities.”

Spain/Telefónica S.A.

“Create value through human capital development/productivity; improve process efficiency and effectiveness; strengthen internal capacity and capability; promote innovation and creativity.”

Malaysia/Telecom Malaysia Berhad

“HR is a strategic partner, an employee sponsor or advocate and a change mentor. HR has a critical role to play in identifying an organization’s competitive advantage and ensuring its success.”

Mozambique/Telecommunication of Mozambique

5.2.2 The three major challenges for HR today and over the next three years

The analysis shows that managing change and organizational development are and will be important issues for HR professionals in participating organizations. Leadership development is one of the major challenges for today. Creativity and innovation are expected to play a larger role in the years to come.

Looking ahead, the three key issues expected to pose a challenge three years from now are managing change (32 per cent), organizational development (33 per cent), and creativity and innovation (31 per cent).

Table II: The major challenges for HR today and over the next three years

Challenges ranking	Today	Over the next three years
Leadership development	43%	30%
Managing change	34%	32%
Organizational development	33%	33%
Training and development	30%	30%
Organizational performance	30%	27%
Employee retention	30%	27%
Talent management	23%	27%
Employee engagement	23%	17%
Compensation	20%	20%
Creativity and innovation	20%	31%
HR measurement and benchmarking	13%	27%

5.2.3 Training

To meet the above-mentioned challenges, participants foresee the need for training (87 per cent), learning the best practices (67 per cent), and use of HR measures (65 per cent).

Policy-makers and regulators rely more on external training, while Sector Members rely on internal training. The percentage of employees who have received training throughout the last year is presented below:

Table III: Training received within the last year

Challenges ranking	External training	Internal training
Policy-makers, regulators	33%	25%
Sector Members	18%	32%

5.2.4 Training budget

Thirty-three per cent of the surveyed organizations spend from 1 per cent to 5 per cent of their annual payroll costs in the training their employees, 27 per cent spend from 6 per cent to 10 per cent and 40 per cent of the respondents do not possess figures in that regard.

The budgets allocated for training represent a high percentage of payroll costs, showing that most organizations are committed to staff development and view training as an investment, rather than a cost.

5.2.5 The most important areas where HR training is needed

The findings of the survey show that managing change and organizational development (see 5.2.2) are and will be important issues for HR professionals in the participating organizations. Rapid technological change and competition are the challenges facing HR professionals in the area of change management.

Table IV: The most important areas where HR training is needed over the next three years

Required training over the next three years	
Management of talent and competencies	43%
Performance improvement	42%
Strategic human resources management	39%
Performance management and pay policy	38%
Career management	36%
Strategic management	29%
Knowledge management	29%
Reward strategies	26%
Competencies for competitiveness	23%
Information systems and business management	23%
Managing diversity	23%
Reengineering the human resources function	19%
Effective communication in C-suite	13%

Continued changes will require a review of business processes and procedures to ensure organizational effectiveness and development. Organizations have to adapt to change more rapidly than before, with the **changes being driven from HR**. Learning the best practices and finding new ways to measure and improve contributions to the business are and will be at the core of HR effectiveness. The challenge is to build consistent indicators in a quickly changing environment. The role of HR professionals continues to increase in value: more functional skills, strategic competencies and greater leadership expectations are placed upon individuals in the profession.

This shows that the most important areas where HR training is needed over the next three years – management of talent and competencies, performance improvement and strategic human resources management – are correlated with the major challenges for HR over the next three years: managing change, organizational development and creativity and innovation .

5.3 Human capital development

“The value of an intangible asset such as human capital can be measured through its readiness to support the strategy.”

Robert Kaplan and David Norton

5.3.1 The contribution of the HR function to human capacity development

Fifty-nine per cent of the participants explained their contribution as assisting in ongoing education, training and development of personnel; 31 per cent have connected the HR function contribution to the HR strategic role, meaning that HR professionals should take advantage of becoming more strategic and of developing into true business partners, aligning human capital interventions with future business objectives through HR capacity building and development and closing the performance gap.

Ten per cent of the participants did not respond to this question.

A few quotes from the responses to the survey:

“There is a strategic value in continuously training and developing employees in order to enhance the organization’s ability to meet its mission and to increase the ability of employees to achieve rewarding careers within the organization.” *Peru/OSIPTEL*

“To fill the gap between the requirements and skills, we identify training needs based on task analysis and develop corporate training plans.” *Mongolia/MobiCom Corporation*

“HR plays a strategic role through the identification of performance gaps and training needs, which are addressed through capacity building and development.” *Kenya/Communications Commission of Kenya*

“The HR function develops and trains staff for effective performance, leadership and managerial competencies.” *Uganda/MTN Uganda*

5.3.2 The priorities for human capital development

Human capital has value in the context of the organizational strategy. The training and development programme will be rated according to the strategy of the organization. It is essential to understand the key components of strategic readiness and human capital development, such as strategic awareness, strategic alignment, strategic skills, leadership, etc.

The participants mentioned the following priorities for human capital development:

1. Strategic skills/competencies	90%
2. Leadership	87%
3. Culture/strategic awareness	73%
4. Strategic alignment	70%
5. Strategic integration	63%

5.3.3 Strategic skills/competencies challenges facing the ICT sector today

Fifty-seven per cent of the respondents mentioned challenges in a broad range of skill areas: managerial skills in a converging, competitive environment of accelerated convergence; policy and regulation; introduction of new services; marketing and customer orientation; innovation and creativity of products and services; ICT applications; technology trends; strategic HR management, etc.

Twenty-three per cent were more specific, depending on the type of organizations they work for:

Regulators – “...Spectrum pricing – auctioning procedures and guidelines.” *Kenya/Communications Commission of Kenya*

Sector members – “Skills competencies relating to NGN/IP platform (network).” *Malaysia/Telecom Malaysia Berhad*

5.3.4 ICT professional skills needed for strategy implementation in the context of an organization’s strategy

Responses to this question varied greatly. The following are the combination of responses: skills in next-generation networks (NGN); policy and regulation under a converged environment; project management; website development and management; skills in business process management (BPM); ICT (multi-skilling of IT and technical staff to enable them to work in any field); skills in digital broadcasting planning; dealing with ITU notices on satellite issues; and skills in emerging telecommunication policy and regulatory issues.

5.3.5 Main ICT skill gaps

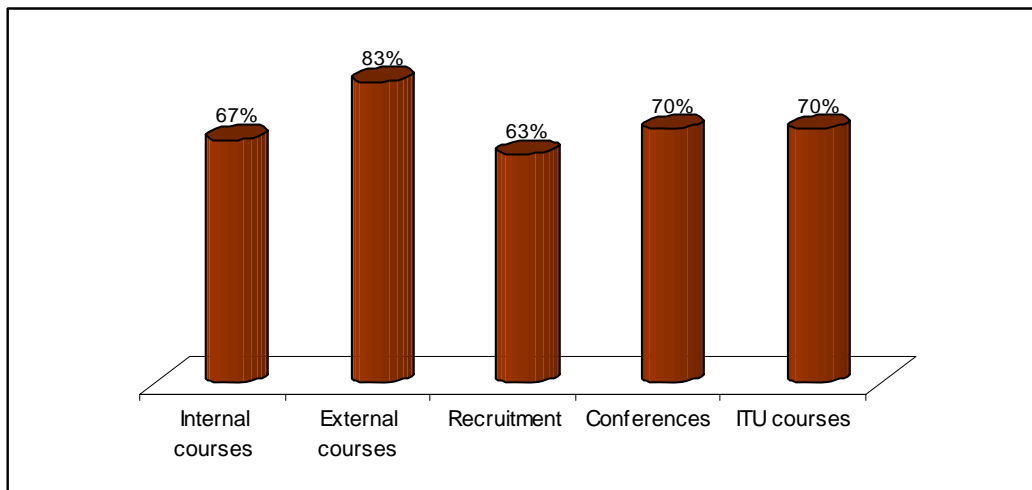
Sixty-three per cent mentioned the same aforementioned ICT professional skills as required for strategy implementation.

It should be noted that policy-makers stressed the existence of gaps such as *ICT skills for the effective implementation of e-governance policies and development of the information society*.

5.3.6 Bridging the strategic HR readiness gap

Organizations are reducing the strategic HR readiness gap through the means mentioned in Figure 5.1, as well as through membership to different international professional associations.

Figure 5.1: Bridging the strategic HR readiness gap



5.3.7 Difficulties in recruiting personnel with ICT professional skills

The respondents mentioned mainly two kinds of difficulties they had met in recruiting personnel with ICT professional skills, namely: shortage of ICT specialists and high remuneration costs of ICT specialists.

A few quotes from responses to the survey:

- Policy-makers, regulators:

“There are not many qualified people wanting to work in the public service sector, as salaries are not competitive enough in comparison to private sector. Shortage of skilled people, difficulties in retaining experts.” *Lithuania/Communications Regulatory Authority of the Republic of Lithuania (RRT)*

“Very low levels of salary in the public administration.” *Bulgaria/State Agency for Information Technology and Communications*

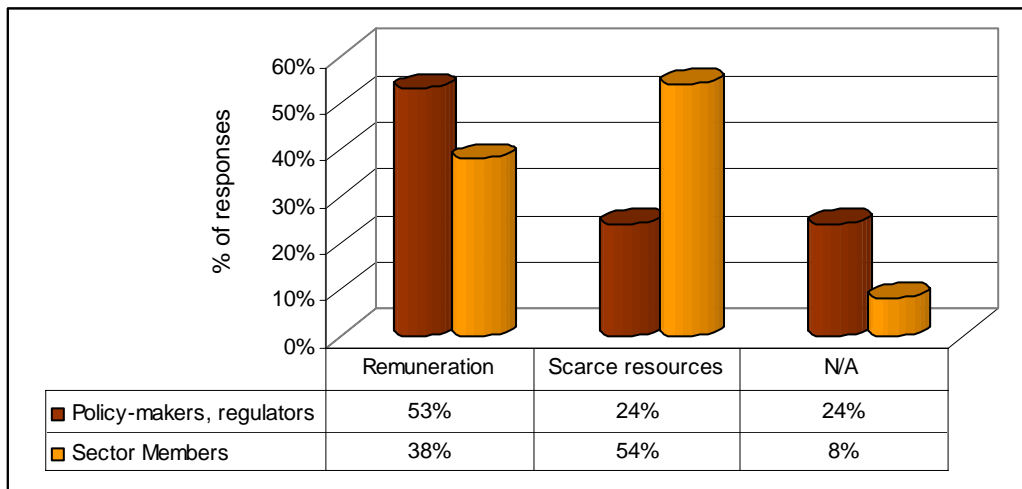
“The very rapid development of new ICT tasks and the urgent requirement for employees with the necessary skills cause sometimes the impossibility to find the right employee.” *Peru/OSIPTEL*
- Sector Members:

“Problem of uncompetitive remuneration.” *Zimbabwe/Netone Cellular Pvt Ltd*

“Bad preparation (low level) of specialists in institutes of higher education.” *Kyrgyzstan/Open joint-stock company "Kyrgyztelecom"*

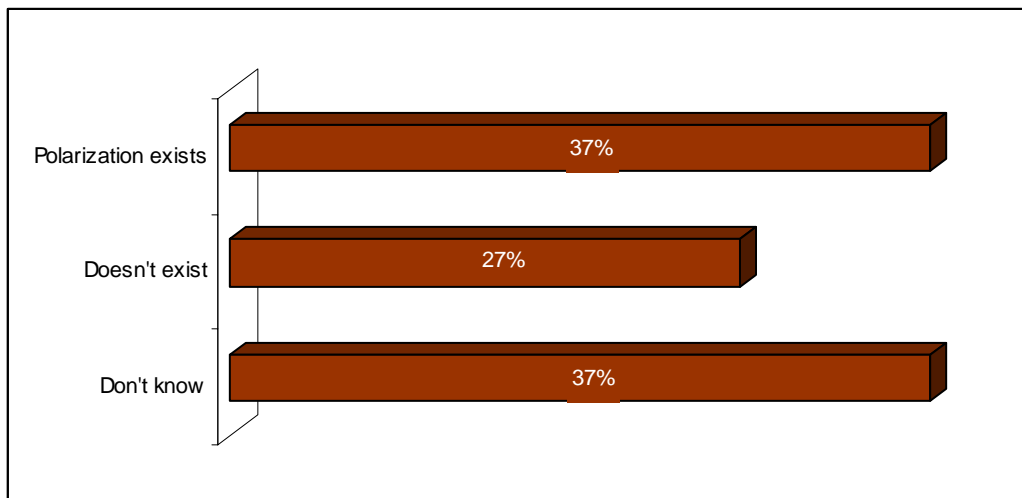
“Lack of executive profiles in research and development, Internet and new technologies.” *Spain/Telefónica S.A.*

Figure 5.2: Difficulties in recruiting ICT professionals



5.3.8 The polarization between traditional public/institutional education and contemporary ICT needs

Figure 5.3: The polarization between institutional education and contemporary ICT needs



“The initial syllabus in our universities was not tailored to prepare students for jobs in the ICT sector (electrical engineering-light current), as opposed to specialization in telecommunications, policy and regulation.” *Kenya/Communications Commission of Kenya*

“Lack of experienced personnel, new graduates require additional training and no local high-level training institutions.” *Mongolia/MobiCom Corporation*

Thirty-seven per cent of the participants, a mix of policy-makers, regulators and Sector Members, thought that there exists some polarization (misalignment) between traditional public/institutional education and contemporary ICT needs.

5.3.9 The vendor-based/organizational ICT certifications and the academic institutions’ ICT certifications, which are more valuable for organizations

In recent years, the educational market for ICT professionals has been subject to structural changes in many countries. Vendor-based certification schemes have been introduced, and vendor specific schemes exist in parallel to public vocational or tertiary education systems that have elsewhere been introduced through public-private partnerships, where industry and public educational bodies have aligned their specifications of curricula and certification issuing.

As these developments emerge, it may be worthwhile not only to assess scarcities but also to see how enterprises rate the different kinds of certification and training schemes.

Awareness and interest in vendor-based and public education diplomas have also been surveyed.

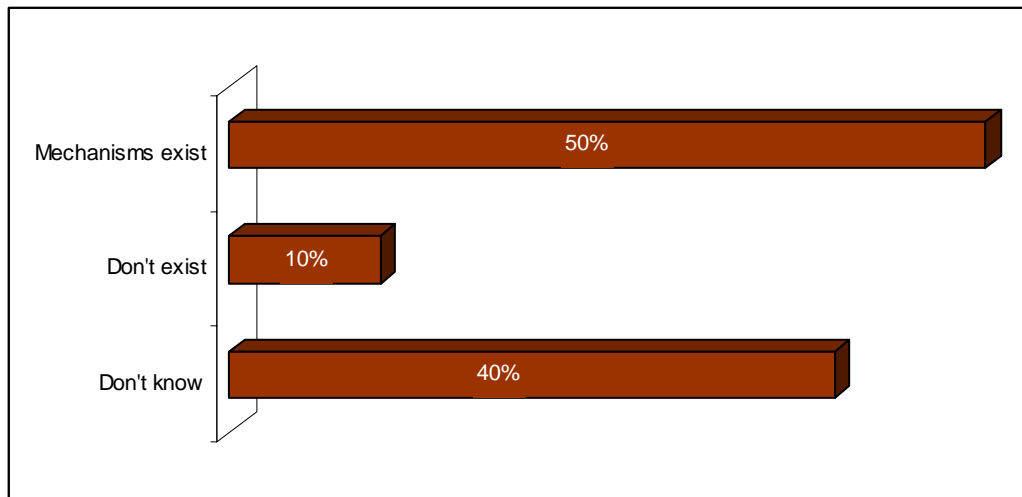
- The following are the combination of vendor-based/organizational ICT certifications listed by the participants: Cisco, Microsoft, Motorola, Nokia, Siemens, Avaya, Nortel, Ericsson, PMP, PMI, WiMAX Forum, 3GPP, 3GPP2, Huawei, Iskratel, Nera, Ceragon, CCNA,CCNP,CISA,MSCE, MCP, ZTE, etc.

As mentioned by most of the participants, vendor-based training in the sector is very high and their certifications are not only recognized but also sought after.

- With regard to the academic institutions’ ICT certification, the participants mentioned all locally accredited institutions that are valuable to them.

5.3.10 National mechanisms or institutions supporting the development and implementation of a long-term and consistent ICT skills development agenda

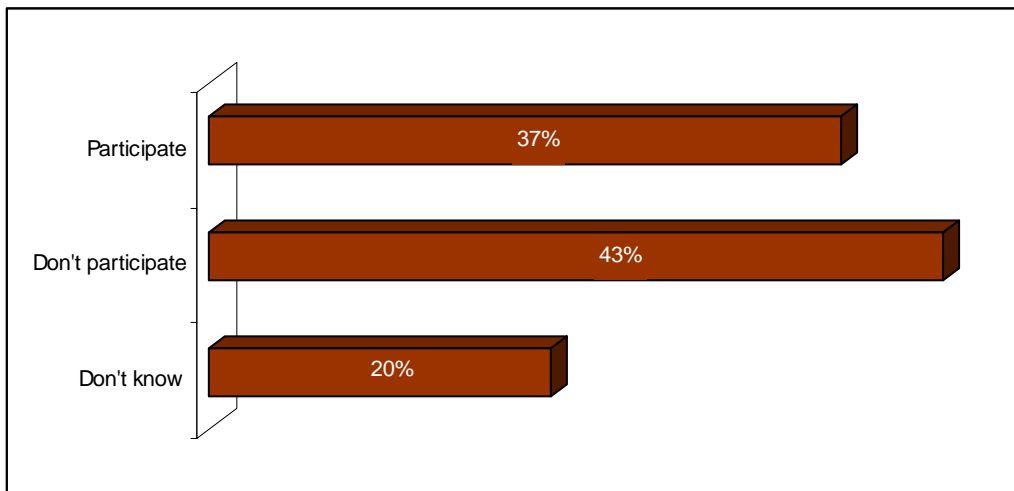
Figure 5.4: National mechanisms supporting the implementation of an ICT skills development agenda



Fifty per cent of the participants stated that there existed such mechanisms, and mentioned the source of relevant documentation.

It is essential that all policy-makers adopt a long-term and consistent ICT skills agenda. In many developing countries, a polarization exists between traditional public/institutional education and contemporary ICT needs. In the fast-moving area of ICT skills, industry-based education has quickly become one of the mainstays of skills provision. Policy-makers and industry should act more decisively and consistently regarding their strategies to promote a long-term operation of multistakeholder partnership for ICT skills development.

Figure 5.5: Participation in multistakeholder partnerships for ICT skills development



Thirty-seven per cent of the surveyed organizations participate in multistakeholder partnerships for ICT skills development.

However, more work could be done to forge stronger private/public partnerships to increase participation where none exists.

5.4 Building the information society

Governments (policy-makers) are taking the lead in the process of developing and implementing national e-strategies, building **the information society at national level**, but also facilitating the participation of actors such as regulators, private enterprises, civil societies, academic communities, regional and international organizations.

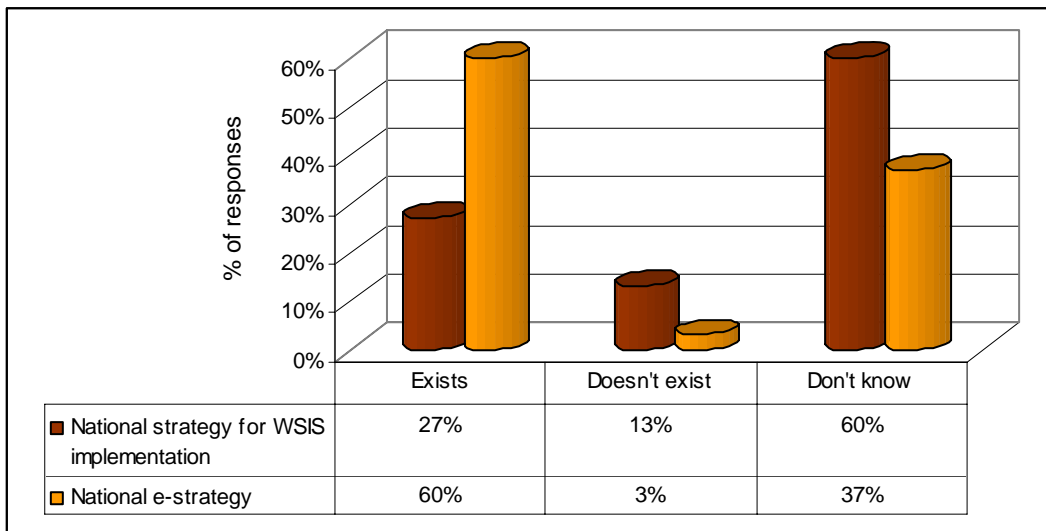
To efficiently implement strategies in knowledge-based societies and organizations, top managers also have to communicate and educate the workforce on what the strategy is all about. **Strategy must become everyone's job.**

5.4.1 A strategy for coordinating the implementation of the WSIS Action Plan at the national level

Twenty-seven per cent of the participants mentioned the existence of a national strategy for implementing the WSIS Action Plan, while 60 per cent of the respondents are not aware of such a strategy. Sixty per cent of the participants confirmed the existence of a national e-strategy and provided the source of relevant documentation/information, 37 per cent are not aware of one.

The lack of awareness of the existence of a national ICT strategy within countries is cause for concern (60 per cent), given that the success of any ICT strategy requires planning of the necessary human capacity to make it happen and effective. Despite this, there is a high awareness of national e-strategies (60 per cent), meaning that perhaps we do not have a holistic application of ICT policies in some of these countries.

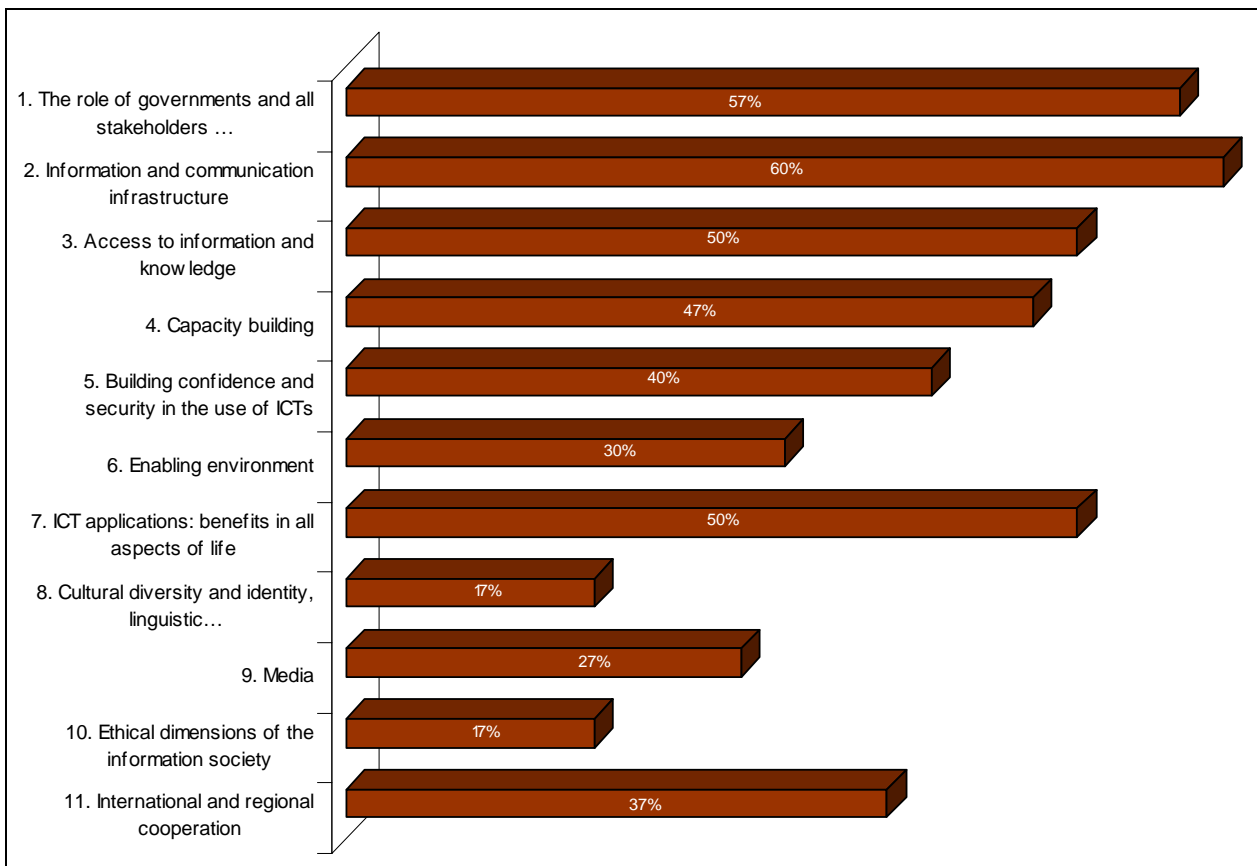
Figure 5.6: National strategy for coordinating the implementation of the WSIS Action Plan



5.4.2 WSIS action lines and themes that are relevant to the above-mentioned activities

Seventy-seven per cent of respondents indicated the following WSIS action lines and themes as being relevant to their national strategies:

Figure 5.7: WSIS action lines that are relevant to national strategies



From the WSIS action lines 2 (Information and communication infrastructure) and 5 (Building confidence and security in use of ICTs), where ITU is facilitator, 60 per cent of the participants and 40 per cent of the participants, respectively, mentioned relevance to their national strategies. For line 4 (Capacity building), where ITU is co-facilitator with UNDP and UNESCO, 47 per cent of the participants mentioned relevance to their national strategies. This calls for the creation of comprehensive communication, education and training processes.

5.4.3 How can ITU-D/HCB assist organizations in human capacity development with a view to contributing to the implementation of national e-strategies?

According to the respondents, ITU-D/HCB can assist organizations' human capacity development in the contribution to national e-strategy implementation through continuous training and skills development, sharing of best practices and success stories, establishment of a networking platform, through awareness of the importance of ICT at government level, benchmarking and study groups.

The following has been proposed by 67 per cent of the participants:

“That ITU assist us with opportunities for continuous learning and skills development.” *Peru/OSIPTEL*

“Via regular ITU-D/HCB tools, such as training/seminars.” *Lithuania/Communications Regulatory Authority of the Republic of Lithuania (RRT)*

“We would be highly grateful if our organization was provided with opportunities (free) to participate in the events and trainings organized by ITU and had access to various information databases. For a small operator in a developing country, it is not always affordable to attend the events that are interesting to us.” *Mongolia/MobiCom Corporation*

“International conferences; cooperation with the Regional Office for Arab States.” *Egypt/Arab Academy for Science, Technology and Maritime Transport*

“1) Sharing of best practices and success stories; 2) establishment of a networking platform.” *Malaysia/Telecom Malaysia Berhad*

“Training (attachments, online training, loan of trainers); funding – sponsorships/fellowships; workshops, seminars; benchmarking; study groups.” *Kenya/Communications Commission of Kenya*

“Through awareness of the importance of ICT at government level.” *Zimbabwe/Econet Wireless (Pvt) Ltd*

“Have joint awareness forums.” *Mauritius/AfriNIC*

“Through the organization of workshops, training programmes, seminars, etc., particularly for least developed and developing countries. Through the allocation of more funds from ITU.” *Malaysia/Asia-Pacific Institute for Broadcasting Development (AIBD)*

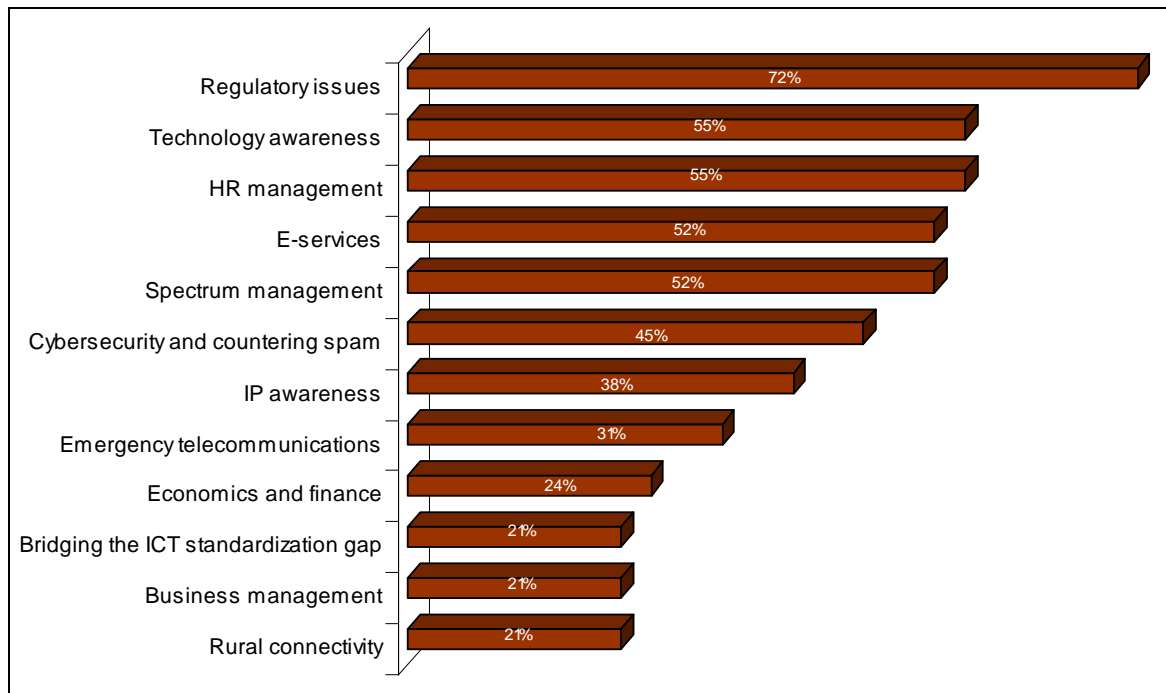
“1) Sharing the experience of other nations; 2) supporting the building of national professional capabilities.” *Qatar/Supreme Council of Information and Communication Technology*

5.5 ITU-D human capacity building

5.5.1 The areas where the ITU-D/HCB contribution has been valuable for organizations in meeting human capital development needs

A large majority (90 per cent) of the respondents consider that the more valuable contribution to their organizations' have been in the areas of: regulatory issues (72 per cent), HR management (55 per cent), and technology awareness (55 per cent).

Figure 5.8: ITU-D/HCB contribution valuable to organizations



5.5.2 The areas where the ITU-D/HCB contribution could be a valuable tool in meeting organizations’ HCD needs

Below the responses received from 52 per cent of the participants:

“Spectrum economics, NGN, converging networks (technical and regulatory aspects), cybersecurity and cyberattacks.”

“Cybersecurity and countering spam , e-service, information and communication infrastructure, HRM/HRD, training of trainers.”

“New technologies; e-education.”

“1) Human resources management; 2) strategic management; 3) strategic skills/competencies; 4) leadership; 5) management of talent and competencies; 6) development of a knowledge management system; 7) design of a strategy to use ICTs in HCD.”

“Skills in regulatory issues and applications under convergence (i.e. technical interconnection, enforcement issues.); market and price modelling; competition regulation; project management; adoption of new technologies for postal and telecom activities; spectrum management in the era of convergence (pricing/auctioning); skills in next-generation networks (NGN); skills in digital broadcasting planning; skills in evaluating national environmental management authorities reports on environmental impact assessment and audit.”

“E- services; IP awareness; business management; rural connectivity; economics and finance.”

In addition:

“Provide an opportunity to participate in training sessions, connect with consultants and experts and access the e-library.”

“1) Platform for networking; 2) source of reference for best practices.”

“Sharing professionals due to shortage of experienced candidates.”

“Development programme on digital radio broadcasting; development programme on digital TV broadcasting; development programme on digital audiovisual archive.”

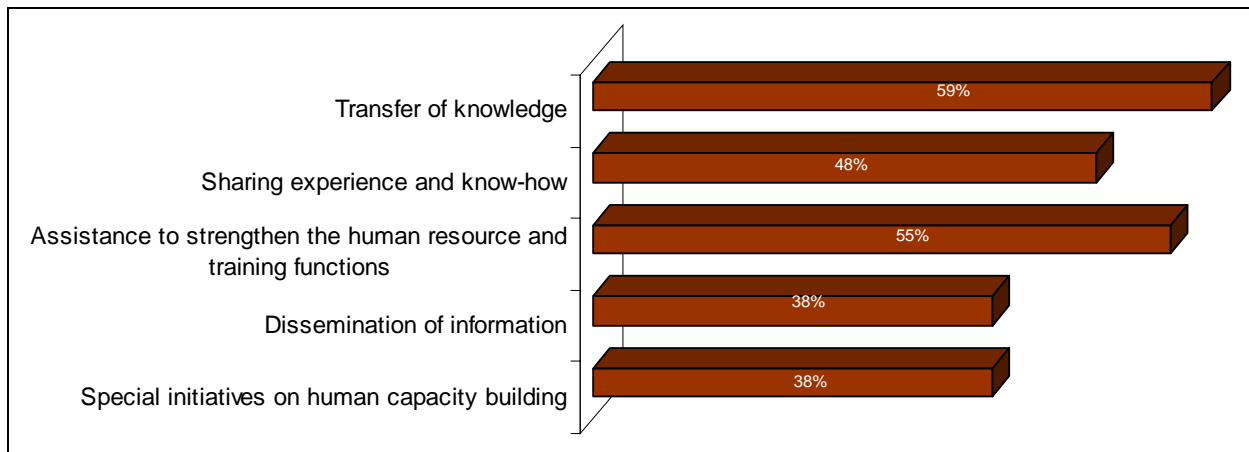
5.5.3 Access to the ITU-D human capacity building website

Fifty-nine per cent of the participants have access to the ITU-D human capacity building website.

5.5.4 Acquaintance with ITU-D human capacity building five major tasks

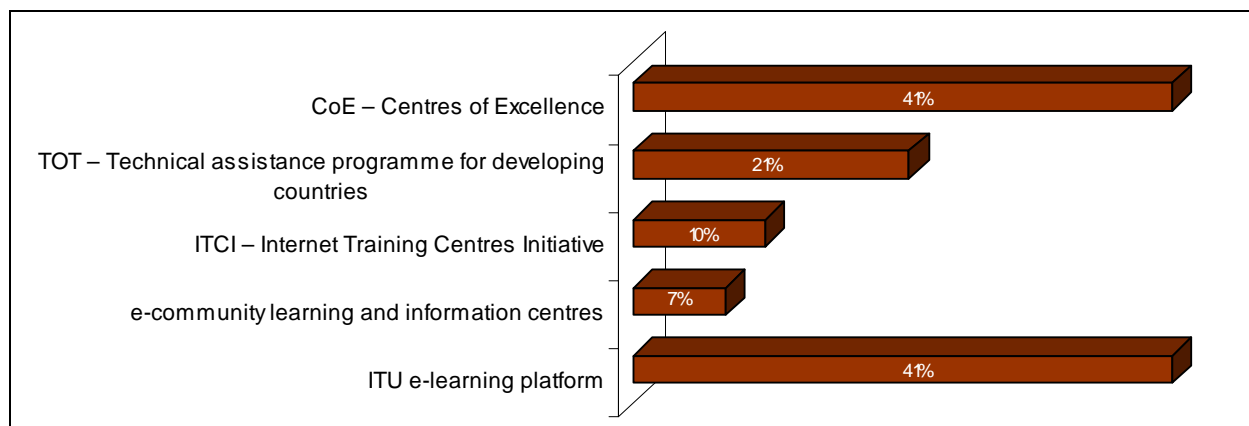
Participants acquainted with ITU-D human capacity building five major tasks indicated the following areas as being of great relevance to their organizations:

Figure 5.9: Acquaintance with ITU-D human capacity building five major tasks



5.5.5 Acquaintance with human capacity building special initiatives using the blended learning approach

Figure 5.10: Acquaintance with human capacity building special initiatives



Most of the respondents who did not participate in ITU-D online workshops indicated insufficient time to react to the notification as the reason preventing their participation, while only a few blamed a poor Internet connection within their organizations.

How can the network of excellence be of benefit to participating organizations: respondents believe it will help by keeping them abreast of the best international practices in ICT development and activities; providing blended training and consulting; organizing conferences and seminars; and by sharing experience and know-how. Many organizations expressed their willingness to host workshops in their own countries.

Participants expected support from ITU-D through:

- more information about the ITU-D functions;
- improved communication;
- granting of fellowship or sponsorships;
- provision of in-house training, training of trainers;
- organizing new courses and promoting internships;
- developing customized training courses tailored to their needs;
- providing information in a timely manner;
- e-learning activities organized by ITU, free-of-charge, for public administrations;
- studies that lead to qualifications, and which can be used in the future.

5.5.6 What form of support do organizations expect from ITU-D in order to achieve their HRD/HRM goals:

- assistance to transform HR into strategic HR;
- training on managerial skills and shared HR initiatives within the telecom sector;
- development of regional networks of human resources managers, especially among governmental organizations;
- free admission to training and access to e-libraries, constituting a bridge to consultants and experts.

5.5.7 Opinion about the establishment of a regional network of HR managers to better respond to the evolving human capacity development trends and discuss common-interest topics

Seventy-four per cent of the participants support the idea:

“This kind of network will help to spread knowledge, share know-how, experiences, and best practices into a collaborative environment.”

6 RECOMMENDATIONS

About organization and the HR function

It is recommended that ITU-D:

- Assist HR professionals in the development and implementation of HRM/HRD strategies, in compliance with overall strategy.
- Assist in designing and implementing the strategic measurement system (creating an HR strategic scorecard for policy-makers, regulators, Sector Members).
- Create related high-level framework guidelines, tools and training materials based on international best practices.

HR's role and new challenges

It is recommended that:

- In designing HRD activities for the ITU-D 2009-2010 Operational plan, BDT/HCB should take into consideration the survey results, reflecting:
 - the most important areas of HR training needs
 - the major challenges for HR over the next three years.

Human capital development

It is recommended that:

- ITU-D assist policy-makers, regulators and ITU Sector Members in the area of human capital development, with the objective of closing the strategic HR readiness gap in the identified areas: convergence, including Internet-related public policy matters, next-generation networks, emerging telecommunication policy and regulatory issues.

Recommendations for actions by ITU:

- To organize training courses for strategic skills/competencies development taking into consideration the survey results with the following themes:
 - Four to five strategic skills/competencies challenges facing the ICT sector today
 - In the context of an organization's strategy, the necessary ICT professional skills for the strategy implementation
- To provide useful guides and favourable framework conditions for promoting national multistakeholder partnerships for ICT skills development.
- To hold two workshops in some of the developing or least developed countries to study their current situation and needs, and transfer experience from developed countries to developing ones to help them build their own HR strategies and ICT skills agenda.

Building the information society

Governments (policy-makers) are taking the lead in developing and implementing national e-strategies and building the information society at national level. They are also facilitating the participation of actors such as regulators, private enterprises, civil societies and the academic communities, as well as regional and international organizations.

To execute strategies in a knowledge-based society, top-level management should formulate the strategy and then communicate it and inform the workforce about what the strategy is. Strategy should become everyone's job.

It is recommended:

- In coordination and collaboration, as appropriate, with the other ITU Bureaux and the General Secretariat, to create a comprehensive communication, education and training process (via workshops, seminars, conferences) for developing countries, least developed countries, countries with economies in transition and small island developing States, on the topic "Building the information society". This training/communication process should focus on:
 - Developing guidelines for building national e-strategies
 - Benchmarking for monitoring progress
 - Annual progress reports at the national level
- It should have as a purpose the sharing of best practices on e-strategy execution and now to create it as a core competency at national level.
- The above recommendation is vital taking into consideration that:
- In 2010, prior to the ITU Plenipotentiary Conference of 2010 (PP-10), a gap analysis will be performed between the activities undertaken and related achievements obtained, as compared to expected results, according to the WSIS goals;
 - ITU is a facilitator of WSIS action lines C2 (Information and communication infrastructure), C5 (Building confidence and security in use of ICTs), and co-facilitator of most WSIS action lines, particularly C4 (Capacity building).
- To create a working team in partnership with UNDP and UNESCO on human capital development in building the information society.

ITU-D human capacity building

Recommendations:

- Consideration of all the above-mentioned recommendations.
- More and better communication with ITU-D regional offices, Member States (especially), regulators, and Sector Members, fostering national, regional and international cooperation, and information dissemination on ITU-D activities through various communication means, including the BDT/HCB website and publications
- With the partnership of donor organizations, to provide members with the possibility of access to the e-library, constituting a bridge to consultants and experts.
- With the partnership of donor organizations, to establish a regional network of HR managers to better respond to the evolving human capacity development trends, to discuss common-interest topics, spread knowledge, share know-how, experiences and best practices, within a collaborative environment.
- Periodically organize similar surveys as this one.
- Given the perceived success and contribution of centres of excellence to capacity building in a region, it is recommended that CoE be strengthened as a capacity development delivery mechanism that has been tried and tested and found to be valuable.

7 CONCLUSION

The telecommunication/ICT industry has undergone a number of major changes over the last years. Large-scale changes are accompanied by emerging or existing competency gaps that inhibit the strategic readiness of human capital. Capacity building is becoming a key theme in the context of a converged, competitive telecommunication/ICT environment.

The current survey is designed to define HRD/HRM current and future needs and priorities in a converged, competitive telecommunication/ICT environment.

The results of the survey will help WGHRD in formulating new initiatives and projects to assist BDT/HCB to enhance the scope of its human resources development activities, as well as to coordinate the actions evolving from the WSIS Geneva Plan and Tunis Agenda.

3 CONTACT INFORMATION

For further information or any questions regarding this survey, please contact:

Prof. Ahmed El Sherbini
Chairman, WGHRD
Cairo, Egypt
Tel: +202 3534 2424
Fax: +202 3534 2427
E-mail: sherbini@nti.sci.eg

Mike Nxele
ITU/HCB Officer
Geneva, Switzerland
Tel: +41 22 730 5983
Fax: +41 22 730 5527
E-mail: mike.nxele@itu.int

Narine Abazian
Vice-Chairman, WGHRD
Yerevan, Armenia
Tel: +374 91 225 535
Fax: +374 10 250 748
E-mail: narine.abazyan@ties.itu.int

ANNEX 1

Participating countries by region

Africa

Kenya
Mauritius
Mozambique
Uganda
Zimbabwe

Americas

Barbados
Bolivia
Honduras
Jamaica
Peru

Asia-Pacific

Malaysia
Mongolia
Myanmar

Arab States

Egypt
Jordan
Mauritania
Qatar
Saudi Arabia

CIS

Armenia
Kyrgyzstan
Moldova

Europe

Bulgaria
Croatia
Hungary
Lithuania
Spain

ANNEX 2

Participating organizations by region and by country

Africa

Kenya/Communications Commission of Kenya
Mauritius/AfriNIC
Mozambique/Telecomunicações de Moçambique, SAR
Uganda/MTN Uganda
Zimbabwe/Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ)
Zimbabwe/Netone Cellular Pvt Ltd
Zimbabwe/Econet Wireless (Pvt) Ltd

Americas

Barbados/Fair Trading Commission
Bolivia/Superintendencia de Telecomunicaciones
Honduras/HONDUTEL
Jamaica/Office of Utilities Regulation (OUR)
Peru/OSIPTEL

Asia-Pacific

Malaysia/Telecom Malaysia Berhad
Malaysia/Asia-Pacific Institute for Broadcasting Development (AIBD)
Mongolia/MobiCom Corporation
Myanmar/Posts and Telecommunications Department

Arab States

Egypt/Arab Academy for Science, Technology and Maritime Transport
Jordan/Telecommunications Regulatory Commission
Mauritania/Regulatory Authority
Qatar/Supreme Council of Information and Communication Technology
Saudi Arabia/CITC

CIS

Armenia/Ministry of Transport and Communication
Kyrgyzstan/Kyrgyztelecom (open joint-stock company)
Moldova/National Regulatory Agency for Electronic Communication and Information Technology

Europe

Bulgaria/BTC
Bulgaria/State Agency for Information Technology and Communications
Croatia/Croatian Postal and Electronic Communications Agency
Hungary/National Communications Authority, Hungary
Lithuania/Communications Regulatory Authority of the Republic of Lithuania (RRT)
Spain/Telefónica S.A.

