Annual report on information technology and telecommunications

Report by the Secretariat

1. At its seventeenth meeting in January 2013, the Programme, Budget and Administration Committee of the Executive Board suggested that the Secretariat submit an annual report on information technology and telecommunications. This report covers both the global and local dimensions of information technology that help the Organization to attain its strategic health and administrative goals by developing an effective technology environment and implementing targeted solutions for the whole of WHO.

INFORMATION TECHNOLOGY

2. The Secretariat’s information technology function is focused on five key areas (Figure 1).

Figure 1

Five key areas of information technology in WHO
Infrastructure. These are services that form the foundation for other services to run. They include connectivity (networks), telephony, meetings, conferences, electronic messaging, file and print services, identity and access management, hosting, and collaboration tools.

Business solutions. These are applications and tools developed for staff and other partner entities to manage the business by entering data, generating transactions and producing reports. The Global Management System, for example, is in this area.

Support. Any service, application or tool provided to end users must be supported. Proper training and the right level of help desk support must be provided to enable end users to derive maximum benefit from an information technology solution.

Risks. Information technology services must be available, reliable and stable. The Organization invests in initiatives to ensure that services run continuously, while protecting its assets and information. Extra layers of security are provided by, for instance, enabling access to WHO systems through remote access tokens.

Processes. In order to ensure that projects are delivered of high quality and on time, that services are operated in a cost–effective way, and that changes do not disrupt staff’s work, processes such as project, service and change management are put in place to govern activities.

THE DIRECTION OF INFORMATION TECHNOLOGY

3. The role of information technology is evolving. Whereas it was formerly seen as a service provider to end users, focusing on provisioning basic services and troubleshooting, it now aims to become a true business partner (Figure 2), which has meant rethinking how information technology and telecommunications operate within WHO (Figure 3).

Figure 2

The business model: becoming business partners
Figure 3

Expectations from a business partner

4. The Secretariat is focused on working closely with business and end users: understanding their needs, developing appropriate yet cost-effective solutions and improving day-to-day support, thereby helping WHO staff to perform their functions better, lower their overhead costs and increase their productivity. Some of the initiatives launched that have been taken in the past year are described below:

• A “global managed workstation” was launched to standardize the computing environment globally, thereby increasing interoperability between offices and staff. Implementation started at WHO headquarters in November 2011, has moved to regional and outposted offices and will be completed in 2015.

• An information technology service catalogue was drawn up in April 2012 to inform staff throughout the Organization of the services provided at headquarters and globally and the mechanisms by which they are supported.

• A relationship management approach was introduced in June 2012, whereby an information technology professional will work with each “cluster” at WHO headquarters to understand their needs at a detailed business level and help them to implement appropriate information technology solutions in a cost–effective manner.

• A global service desk improvement programme was launched in September 2012 to build a competent and excellent service desk with the aim of reducing user downtime, speeding up resolution time and improving customer experience.

5. Expectations of information technology are very high. Technology is changing fast and users’ needs are evolving at a rapid rate. Efforts need to be strategic yet remain sensitive to the needs of the Organization. Following discussions with a number of stakeholders, the Director-General has decided that information technology, in addition, must focus on five other key areas (Figure 4).
Figure 4
The mandate of information technology in WHO

Modernize. The Secretariat is working on upgrading systems and technology to remain current and relevant. Process innovation is also considered to enhance business efficiency and management. The use of tablets and smartphones, for example, has allowed staff to work away from their desks and still be able to manage emails and perform basic office work. Moreover, new ways of holding meetings and conferences online will help reduce travel costs. As systems and technology are continuously upgraded, they need to be secure. WHO’s information assets must be protected. Some of the relevant initiatives that the Secretariat have already initiated are:

- implementation of perimeter security across the global network through strict authentication using tokens, firewalls, and virus protection;
- planning and testing for disaster recovery;
- development of business continuity plans and templates.

Be efficient to generate savings. A certain amount of duplication has existed between offices (for example, different “arrival/departure” systems in each major office, several contracts for the same licenses). The Secretariat is determined to consolidate and streamline processes, thereby reducing the overall total cost of ownership. Any resulting savings can be reinvested into activities that add more value and help to modernize the working environment.

Increase staff productivity. Appropriate and relevant information technology solutions are being prepared that will help staff to work faster but smarter. The integration between telephones and computers, for example, will allow people to be reachable in many different ways (voice and video) and allow for discussions and collaboration on topics requiring action.

Harmonize. The delivery of information technology services across WHO was traditionally devoted to teams in the major offices. In recent years, there has been convergence of work in this area towards common and standardized services (a global private network or the global management system, for instance) while keeping value-adding local services in the regions (such as development of tools for health-related technical work for WHO representatives). In order to have a consistent and measurable approach to service delivery, the Secretariat is working on harmonization or alignment not only of existing services but also programme, budgets and team structures.

Monitor and report. Managing information technology performance against key indicators is vital to becoming efficient and effective. It is important that the investments made and the services provided are managed effectively and controlled financially, to ensure that the expected benefits are realized.
NEW APPROACH: SHARED SERVICES

6. The shared vision for all the Organization’s information technology teams is to move towards standardization of common services and centralization of their delivery whenever these moves can lead to less duplication, better alignment of teams, greater organizational resilience (business continuity), increased leverage of global agreements and solutions, and lower costs. Information technology and telecommunications solutions and services must be relevant to business needs, fit for purpose and cost–effective.

7. Providing appropriate and strategically aligned solutions to business while fulfilling the mandate given requires an effective operating model that ensures optimal use of resources, builds capabilities where needed and allows for increased capacity. This can only be achieved through a “shared service” approach, whereby information technology consolidates common and pervasive services across WHO, standardizes the way in which solutions and services are delivered, delivers them once from a cost-effective location, monitors their performance, and engages in continuous service improvement (Fig. 5).

Figure 5

Shared Service Model

8. By adopting this approach, information technology not only provides consistent and equitable services throughout WHO, it can also take advantage of a number of opportunities:

- The way in which services are provided can be rethought and their delivery and support simplified. Simple and intuitive solutions improve end user experience and customer satisfaction and hence increase productivity.

- The total cost of managing and running information technology services can be reduced by removing redundancies, leveraging existing agreements, making new global agreements and choosing a cost–effective location from which to run operations. Savings can be generated and reinvested.
• Interoperability among WHO staff can be increased as common services and tools are used across offices. This will make it easier and quicker to share information and collaborate on initiatives.

• Information technology staff in major offices can be refocused, relieving them of commoditized tasks and setting them to work on local value-added activities (e.g. technical health-related applications) or to deliver proximity support as needed.

• The need for appropriate governance of information technology processes, resources and assets can be met, to ensure readiness for and competency in becoming an effective and valuable shared service provider to all WHO staff.

• Performance management and measurement can be enforced, in order to ascertain the quality of service, determine alignment with user expectations, reduce risks of service loss, ensure improvements are made on existing services, and monitor costs.

9. The strategic direction for information technology approved by the Director-General has been combined with feedback from users and business units to generate a "pipeline" of new initiatives and projects, some of which started in 2012–2013, while others will be launched in 2014–2015 (Figure 6).

Figure 6
The shared service pipeline

CHALLENGES

10. Implementing a shared service entails a number of challenges:

• The prioritization and availability of funding in major offices may delay, if not prevent, the implementation of any initiative, despite its benefits. It is vitally important that funds are pooled into a central source from which shared services are financed.
• Current resources are used to deliver both projects and services. Working on shared initiatives will stretch current capacities. It is important to continue the work on harmonizing structures, in order to free up vital resources and refocus them on key initiatives.

• Flexibility or agility is key in making big changes; however, the appetite for change varies from one office to the next. Communication and change management processes need to be strengthened.

• Business priorities are still emerging and often divergent; effective and timely engagement through governance processes must therefore be established.

RESOURCE CAPACITY

11. The information technology function is distributed across the entire Organization, with support roles carried out in country offices and in central information technology teams located in each of the seven major offices. It is estimated that there are a total of 371 full-time equivalent posts in these teams delivering information technology projects and services. In addition, there are 66 staff globally who perform information technology-related tasks directly for health technical units.

12. Of the 371 full-time equivalent posts, 129 are with headquarters, split between Geneva (50 posts) and Kuala Lumpur (79 posts). The headquarters team is considerably larger than the regional teams because the nature of the former’s work has two dimensions:

  • global services that headquarters provides to all offices and staff (e.g. the global management system):

  • local services that are specific to the headquarters campus only (local networks, proximity support, and application development for a health technical unit, for instance).

13. To move forward with the shared service model, the Secretariat has developed a harmonized approach to aligning structures across WHO. The appropriate resources must be engaged, regardless of location, in developing any shared initiative. This can be achieved only if they are aligned with the functions, skills and expertise across information technology teams.

BUDGET AND EXPENDITURE

14. For the biennium 2012–2013, the budget of all central information technology teams globally amounted to at least US$ 122 million, which does not include the information technology-related expenditure by technical units on staff, goods (such as computers) and services (consultants, for example).¹ The estimated total budget is split between staff costs (45%) and activity costs (55%) and is further broken down as shown below (Figure 7).

¹ Current studies show that the total cost of this activity by health technical units is at least some US$ 10 million (excluding staff costs).
Figure 7
Breakdown of the global information technology budget

<table>
<thead>
<tr>
<th>Cost type</th>
<th>Office type</th>
<th>US$ (million)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>Major office</td>
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<tr>
<td></td>
<td>Country office/Others</td>
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<td></td>
<td><strong>Subtotal</strong></td>
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<td><strong>45</strong></td>
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<tr>
<td>Activity</td>
<td>Major office</td>
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<td>Infrastructure</td>
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<td>Support</td>
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<td></td>
<td>Management</td>
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<td></td>
<td><strong>Subtotal</strong></td>
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<td><strong>55</strong></td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>122.01</strong></td>
<td><strong>100</strong></td>
</tr>
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</table>

15. Expenditure on information technology per employee per year, calculated as a ratio of the total budget allocation to the total staff in WHO, is US$ 7500. This figure is potentially an underestimate, since staff count figures do not include non-staff employed by WHO (such as those on special service agreements, junior professional officers and consultants) who also use information technology resources to collaborate and communicate within the Organization.

16. The level of information technology expenditure per employee has a direct impact on the resilience of the services provided and ultimately affects staff productivity. According to a survey carried out by a leading information technology research and advisory company, similar companies in the same industry, governmental (national/international), spent approximately US$ 20 000 per year per employee in 2012, three times more than WHO does. In response, the Secretariat will endeavour to find the appropriate level of funding, within current resources, to modernize its technology and increase the productivity of its staff.

17. As part of this effort, the Secretariat has developed strategies to maximize the use of the resources it has available, while developing innovative ways of delivering dependable services that enable the Organization to move forward. This has meant significant changes to staffing levels, locations and structures and has led to new ways of looking at how services are delivered across the whole Organization.

**ACTION BY THE PROGRAMME, BUDGET AND ADMINISTRATIVE COMMITTEE**

18. The Committee is invited to note the report.