

## Examples of topics that are under discussion

### RFID – Radio-Frequency Identification

RFID is the much-touted system that enables data to be transmitted by a tiny portable device, called a tag, which is read by an RFID reader and processed according to the needs of a particular application. Analysts predict that RFID will revolutionize areas of industry including supply chain management, security and mobile telecommunication services. Moreover, RFID will play an important role in achieving the Ubiquitous Network Society. Currently, the market for RFID standards is extremely fragmented. Special standards for certain, limited, fields of applications exist as well as quasi-proprietary or proprietary standards. Many RFID applications still lack global standards for data formats, compatibility, interoperability, interference problems, personal information protection, authentication, key management and others.

### Ubiquitous Networks

In the near future, microcomputers that are invisible to the human eye and that are embedded in everything from cars, pencils, clothes and banknotes are foreseen. These electronic devices could be networked together enabling an environment of smart networked objects. This environment will take advantage of short-range communications technologies such as Bluetooth, WiBRO and radio-frequency identification (RFID), which could be integrated into mobile phones and consumer equipment. Exploiting the identification, localization and monitoring functionalities of these technologies will create a range of possibilities enabling innovative new products and services. In turn, as these smart objects communicate with each other, this will result in an increase in data traffic, market growth and increased profit.

International collaboration between standardization bodies is crucial in the realization of this goal. Without international standards, interoperability will be difficult if not impossible, and these bodies are also in the best position to establish rules to guarantee the privacy of users. Ubiquitous applications must be linked to trusted mechanisms that ensure privacy in order to be successful.



### Technology Watch

Technology Watch is an important new initiative of the International Telecommunication Union (ITU), the United Nations specialized agency for telecommunications ([www.itu.int](http://www.itu.int)).

ITU-T, the standardization sector of ITU ([www.itu.int/ITU-T](http://www.itu.int/ITU-T)), has established the Technology Watch group to monitor academia, industry, research institutes and standards developing bodies for new subjects for study in the field of information and communication technologies (ICT). It aims to foster the efficient development, by ITU-T study groups, of international standards (ITU-T Recommendations) in new and emerging technologies by identifying those areas as early as possible.

### Background

ITU-T's Technology Watch (TW) was created following a decision by the World Telecommunication Standardization Assembly (WTSA-04) in October 2004. TW is open to ITU members and non-members and will survey the ICT environment, focusing on new/emerging technologies and examining market trends in order to capture new topics for standardization work at an early stage. The terms of reference for the group were established at the meeting of the Telecommunication Standardization Advisory Group (TSAG), March 2005.

### Objectives

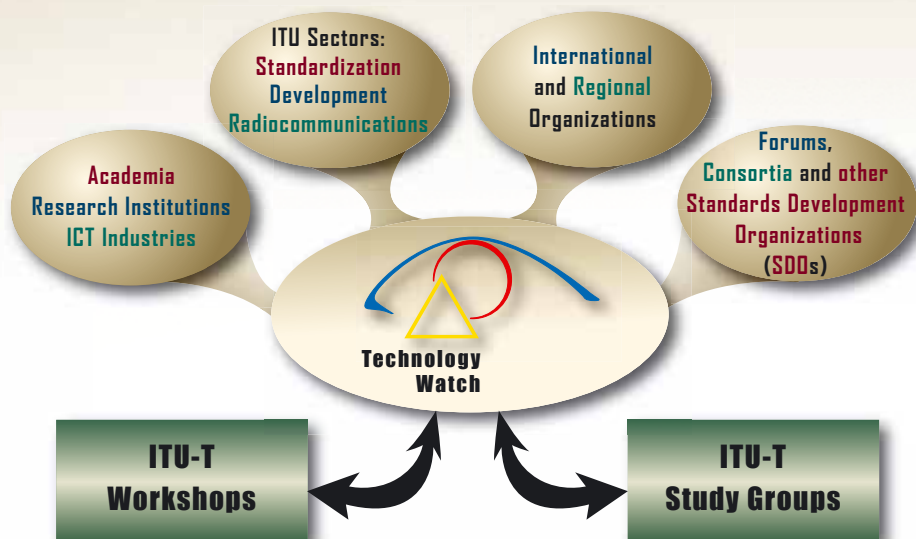
- Survey new/emerging technologies at an early stage and input relevant information into the ITU-T standardization activities;
- Ensure development of timely market-oriented international standards on specific topics;
- Increase cooperation among experts from research institutes, academia, private sector, forums and consortia;
- Align and harmonize studies and research among different standards development organizations (SDOs), in order to avoid duplication of work.

ITU-T communication centre: [www.itu.int/ITU-T/lighthouse](http://www.itu.int/ITU-T/lighthouse)

# Technology Watch

## Towards the future of Information and Communication Technologies (ICT)

## Workflow of Technology Watch



## Join Technology Watch

Technology Watch provides a unique opportunity to benefit from the knowledge and resources of ITU, one of the world's most important developers of information and communication technologies (ICT) standards.

This is an unprecedented opportunity for those working at the cutting edge of technology in universities, research centres or companies in ICT. Technology Watch is a unique platform for discussing and observing emerging technologies.

As technologies mature, the need for international standards becomes more important. Technology Watch seeks to bring together all interested parties, from all over the world.

Additionally and to augment the work of Technology Watch, ITU will organize workshops to bring together students, academics, engineers and scientists from different areas of research, in order to explore synergies, share knowledge, compare approaches and methodologies, etc.

Keep up to date with Technology Watch activities: [www.itu.int/ITU-T/techwatch](http://www.itu.int/ITU-T/techwatch)

For more information, contact the TW secretariat: [techwatch@itu.int](mailto:techwatch@itu.int)

## Technology Watch Correspondence Groups

Technology Watch Correspondence Groups provide a platform for ITU members and non-members, to share views, ideas and needs on new emerging technologies.

- **General Correspondence Group (GCG)**  
If you have a proposal for a new topic for discussion, this is where to post it. The GCG is the place to share information and views. It also acts as a general discussion area and as a meeting point for Technology Watch experts.
- **Specific Correspondence Groups**  
Once a discussion on a particular topic has reached sufficient maturity in the General Correspondence Group, it can be progressed into its own Specific Correspondence Group.

## Technology Watch topics currently under discussion:

