Chapter 25
Contributions to Standardisation

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25.1 Introduction

Standardisation has many goals and facets: Standards are used for consumer protection to achieve a minimum quality of certain products and services. Standards lead to lower cost because of a unified higher volume market. Standards also support interoperability that is vitally needed in ICT.

The ICT landscape is characterised by an extensive division of labour between specialists. The device driver programmers rely on the information that the device manufacturers give them. The operating system developers rely on information and interfaces that are provided by the device drivers and by the CPU instruction set. Application developers rely on the interfaces from the operating system and web developers rely on the interfaces the Web provides. This means that ICT has a much larger need for agreed information that leads to interoperability. In short, ICT needs many more standards than the rest of the industry.

But the function of standards in ICT goes far beyond pure interoperability. A new set of interfaces is sometimes the way to open an entire new world thus creating new markets. For instance, it took new standards to bring the Web to mobile devices thus creating a huge new market for applications and commerce.

Quite often, the idea for such new markets comes out of research. However, researchers are usually not taking the pains to actually create the market. Mostly they are satisfied to show that it theoretically should work and perhaps provide a demonstrator to showcase what it could look like. The European Commission realised this gap and consequently has recently put a lot of emphasis on the relation between research and standardisation.¹

Traditional industry standardisation is rather directed on achieving agreement among several vendors whose products have converged sufficiently to formalise the common understanding of how things should be done. Further, standardisation is used by public authorities to achieve goals of consumer protection.

¹ For further information on research and standardisation see http://copras.org/.
In both fields, PrimeLife has developed activities and has generated impact in the emerging markets concerning privacy and identity management. PrimeLife’s part in ISO\textsuperscript{2} standardisation has focused on high level framework and platform specifications that contain requirements on privacy-respecting software design. The W3C\textsuperscript{3} work has concentrated around enduring the dialogue between web developers, browser makers and researchers, understanding privacy issues of the Web, presenting possible solutions and searching for a possible consensus with the web community. Finally, PrimeLife used the opportunity to offer drafts to the Network Working Group of the IETF\textsuperscript{4}.

In the following, this section gives an overview of PrimeLife’s approach to giving input to the ISO/IEC standardisation (cf. Section 25.2), the project’s collaboration with the W3C (cf. Section 25.3) and some results in the cooperation with the IETF (cf. Section 25.4).

### 25.2 Standardisation in ISO/IEC JTC 1/SC 27/WG 5

In ISO, the joint technical committee ISO/IEC JTC 1/SC 27 is in charge of standardising security standards for information systems. Among other things, they are behind the 27000 series on information security management systems. Within SC 27 the working group 5 (WG 5) is responsible for standards within the identity management and privacy area.

Early on, PrimeLife established a cooperation with WG 5 in the form of a liaison agreement with the group. The reason for the liaison is that WG 5 is working on a number of standards that have commonalities with the aims and the scope of the PrimeLife project and we wanted to be able to influence these standards and to contribute with our knowledge and findings in the standardisation process. The contributions of PrimeLife have been very well accepted by WG 5 and we believe that we have had mutual benefit from the cooperation. Even though the whole spectrum of the standards within WG 5 is of interest, there are three projects that lie close to the work going on in PrimeLife and we have therefore decided to concentrate our contributions to these standards.

The projects concerned are the 24760 “A Framework for Identity Management” standard, the 29100 “Privacy Framework” standard and the 29101 “Privacy Reference Architecture” standard. Most of the contributions have been in the form of discussions on work group meetings and comments on standard drafts; however, there are some areas where PrimeLife has made very significant impact. The remainder of the subsection will discuss specifically PrimeLife’s input to the Framework for Identity Management and the Privacy Reference Architecture.

\textsuperscript{2} ISO stands for International Organization for Standardization. In ICT its work is often aligned with the standardisation within IEC (International Electrotechnical Commission), cf. \url{http://www.iso.org/}.

\textsuperscript{3} World Wide Web Consortium, cf. \url{http://w3.org/}.

\textsuperscript{4} Internet Engineering Task Force, cf. \url{http://www.ietf.org/}.