



General Assembly

Distr.: Limited
20 February 2017

Original: English

**United Nations Commission on
International Trade Law**
Working Group IV (Electronic Commerce)
Fifty-fifth session
New York, 24-28 April 2017

Legal issues related to identity management and trust services

Proposal by the United Kingdom of Great Britain and Northern Ireland

Note by the Secretariat

The United Kingdom of Great Britain and Northern Ireland submitted to the Secretariat a paper for consideration at the fifty-fifth session of the Working Group. The paper is reproduced as an annex to this note in the form in which it was received by the Secretariat.



Annex

Outcome Based Standards and International Interoperability

Enabling International Interoperability

Over the past decade the necessity of electronic identity (eID) to underpin an expanding digital economy has become apparent. Many countries have brought their residents and businesses online through the use of trusted electronic ID, enabling them to transact with their government and with private sector organizations, promptly, efficiently and securely.

While this has been a successful catalyst within countries, eID can only support substantial and sustained economic growth for a digital economy when that eID can operate across borders and jurisdictions. For this to be a reality those countries and jurisdictions need to be able to understand and trust the issuance and security of the issuing country's eID.

It is unlikely that all countries will adopt similar or the same eID scheme. Therefore the only realistic solution is to accept another country's eID on the basis of mutual recognition of equivalent schemes.

Mutual Recognition

Mutual recognition of standards, eID schemes and trust frameworks makes it possible for a user to prove their identity anywhere in the world; users can securely assert their identity to digital services; and an international identity ecosystem can give users and services confidence.

However, for this to be effective there has to be well understood internationally recognized standards by which an eID scheme can be measured. Countries can then express the capabilities of their schemes against such standards, and consumers of the eID issued by that country have assurance about its quality and trust.

Existing Internationally Recognized eID Standards

Many countries already have functioning eID schemes and standards bodies and supra-national organizations have already created a number of standardization frameworks in order to enable mutual recognition. The most prominent frameworks in this area are:

- ISO/IEC 29115 Entity Authentication Assurance Framework
- EU regulation N°910/2014 on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market
- Draft ISO/IEC 29003 Identity Proofing
- NIST SP 800-63-3 Digital Identity Guidelines

Countries can express their capabilities in terms of these frameworks, including through independent certification. To accelerate the growth of the digital economy the UNCITRAL Working Group should look at how to create a structure to determine equivalence between existing international standards, eID schemes and trust frameworks.

There is ongoing bilateral work in this area between the UK, USA and Canada, as well as between some EU Member States as a precursor to notification under EU regulation N°910/2014. Some learnings could be taken from these activities to help inform what further action could be taken at a UNCITRAL working group level.

An Outcome Based Standardization Approach

An outcome based standard clearly describes the outcome that is going to be measured without favouring any specific technology or product. By taking an outcome based approach it is possible to react to new threats, take advantage of new technologies and reduce costs without impacting quality. These changes can be applied in a timely fashion yet remain compliant because the outcome based standard would not require amendment.

An outcome based approach makes it easier to reach a common agreement on the assurance required and to be technology neutral. If the assurance level specifies exactly the solution to be implemented, this creates a “lock-in” to a certain process and/or technology which discourages innovation, prevents evolution and alienates other implementations that deliver the same levels of assurance.

Outcome based assurance can ensure that potential providers have scope to design and develop different methods to achieve the same objective and encourage those providers to compete on cost and capability. Providers are then incentivized to maintain their product, replacing and improving this over time in order to maintain the capabilities and reduce cost. Outcome based levels are not a new concept in European law. To give just one example, by requiring “*a 40% offset deformable barrier test conducted at 56km/h*”, EU vehicle safety legislation allows manufacturers to innovate with new physical materials/alloys to change or redesign their vehicle as long as the resulting vehicle continues to meet the frontal impact outcome based standard.

Example of Mutual Recognition for an Outcome Based Assurance Standard for Electronic Identity — eIDAS

EU regulation N°910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS) created a uniform understanding of the assurance and trust frameworks that are to be accepted at an intra member state level. The Regulation sets out several levels of assurance (low, substantial and high) for electronic identity that define the outcomes that a national eID scheme must be able to demonstrate in order to be considered equivalent.

The principal is that the outcome based approach sets out the objective to be achieved for reaching the different LoAs for each of the different elements of the electronic identification scheme. The more rigorous the objective, controls or process, the higher the level of confidence and therefore the higher the LoA. How the objective is achieved is determined by the scheme operator within the member state. It does not require that a member state alter or harmonize their existing national eID schemes, it is a way to measure the equivalence of a scheme against a set benchmark.

Furthermore, in addition to the substantial work on eIDAS, the U.K. is presently running initial standards mapping exercises with the US and Canada; and scoping similar themed work through its membership of the Digital 5 group of nations Estonia, Israel, New Zealand, South Korea and the U.K.

Summary

The U.K. sees international interoperability of eID as a key driver for the growth of digital economies around the world, which would support sustainable and secure economic growth globally in the future. We support further work being carried out in this area by UNCITRAL, whilst emphasizing the need to ensure that international interoperability, mutual recognition and an outcome based approach are considered, and that any output is aligned to existing internationally recognized eID standards.