Korea's ICT Competency Standards

1. Background and Rationale

As a key enabler for economic and social development, ICT is no longer an option but an imperative that is integral to a nation's development. With the rising popularity of the Internet, the widespread mobile access and the take-up of social media tools, ICT may never find a better opportunity to speed-up its growth, meaning that ICT can contribute significantly to increasing public administration efficiency and transparency and the delivery of public services to the citizen. This in turn requires public officials to build ICT competency and enhance competitiveness.

Against such a backdrop, the Korean government has conducted the ICT Competency Assessment for Public Officials since the early 2000s and implemented policies to improve their ICT competency through tailored ICT education based on the assessment result.

2. Public Officials' ICT Competency Assessment Model

ICT competency can be defined as the ability to solve problems and enhance the organisational performance by using ICT in the work process. The ICT Competency Assessment model used for public officials in Korea largely consists of the common ICT competency and job-based ICT competency as shown in Table 2 below.

Table 2. ICT Competency Assessment Model

Definition of ICT Competency		ICT Competency Assessment Model				
ICT competency	Ability to solve problems and enhance the organisational performance by using ICT in the work process	Common ICT competency (10)	ICT competency that is commonly required in all public officials regardless of their jobs (except for ICT Leadership, which is for management-level officials)	Understanding of ICT (4)		
				ICT Leadership (3)		
				ICT Use (3)		
		Job-based ICT competency (61)	ICT competency specifically required in public officials who have ICT-related jobs (16 jobs)	OS (8)	Middleware (1)	
				DB (6)	Network (6)	
				Security (15)	Program Language (4)	

		Project Management (6)	Web (2)
		ERP (2)	IT Strategy (11)

Source: KLID, 2015 ICT Manpower Capacity Improvement Project Guide

The assessment is conducted in form of the Internet-based test on the website (http://i-cap.e-academy.go.kr) for four weeks around July or August every year.

The behaviorally-anchored rating scale (BARS) is used for assessment and it takes around 15 minutes for public officials in general and 30 minutes for public officials who have ICT-related jobs. One of the distinguishing characteristics of BARS is that it focuses on the behavior shown while working as the standard, or anchor for assessment; therefore, it removes the uncertainties that graphic rating scales have.

The ICT Competency Assessment is targeted toward public officials in the central and local governments and nation-wide educational offices. About $4\sim25\%$ of public officials in the central government offices are assigned for assessment from each of the 14 segments that are defined based on the organisational size and characteristics, while 20% of the public officials in local government offices are assigned regardless of the segments they belong to. The number of assigned officials for each organisation is measured by multiplying the above share to the number of currently working public officials.

3. Future Development and Usage of the ICT Competency Assessment Model

3.1 Improvement of ICT Competency Model

The definition of ICT competency and its components must adapt to keep pace with the acceleration of IT development. In this context, the Korean model was compared with the EU's Framework for Developing and Understanding Digital Competence in Europe (DIGCOMP) to gain new insights to improve the ICT Competency Model.

The SIDs countries also need those kinds of models to mobilize ICT to develop their economy and society. By sharing how Korea developed the ICT Competency Assessment Model, SIDs countries might find some insights how they made their own ICT Competency Assessment Model.