



mobile  
connect

A woman with long brown hair, wearing a dark blazer over a blue top, is looking down at her smartphone. The background is a blurred cityscape with modern buildings.

Integrating existing  
identity solutions into  
Mobile Connect

**SK Telecom**

# SKT – integrating existing identity solutions into Mobile Connect

## Contents

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<b>Summary: SKT harnesses Mobile Connect to go global</b>	<b>1</b>
<b>SKT's existing identity services</b>	<b>2</b>
<b>Why integrate with Mobile Connect?</b>	<b>3</b>
<b>How to integrate with Mobile Connect</b>	<b>4</b>
<b>Conclusion and next steps</b>	<b>5</b>

# Summary: SKT harnesses Mobile Connect to go global

A new initiative in authentication driven by mobile operators around the globe, Mobile Connect provides convenient, secure and privacy-protecting authentication, authorisation and identity services.

SKT is the largest mobile operator in South Korea serving 28 million of the country's 57 million subscribers. By November 2016, SKT's T-Auth authentication solution had 13 million monthly users making 650 million transactions annually with 27,000 service providers, including content providers and social media. Moreover, more than 11 million subscribers were using SKT's T-ID identity solution to access one or more of 15 applications operated by SKT.

In December 2016, SKT adapted both T-Auth and T-ID to comply with the Mobile Connect specifications. The goal was to make it easier for international customers to use SKT's apps and services, and to increase the appeal of T-Auth and T-ID for international service providers.

SKT now plans to leverage the international interoperability offered by Mobile Connect to enable more service providers both in Korea and abroad to benefit from its authentication services. Looking forward, SKT plans to add authorisation – and ultimately identity – capabilities to its third-party product portfolio to address service provider demand for more specific use cases.

# SKT's existing identity services

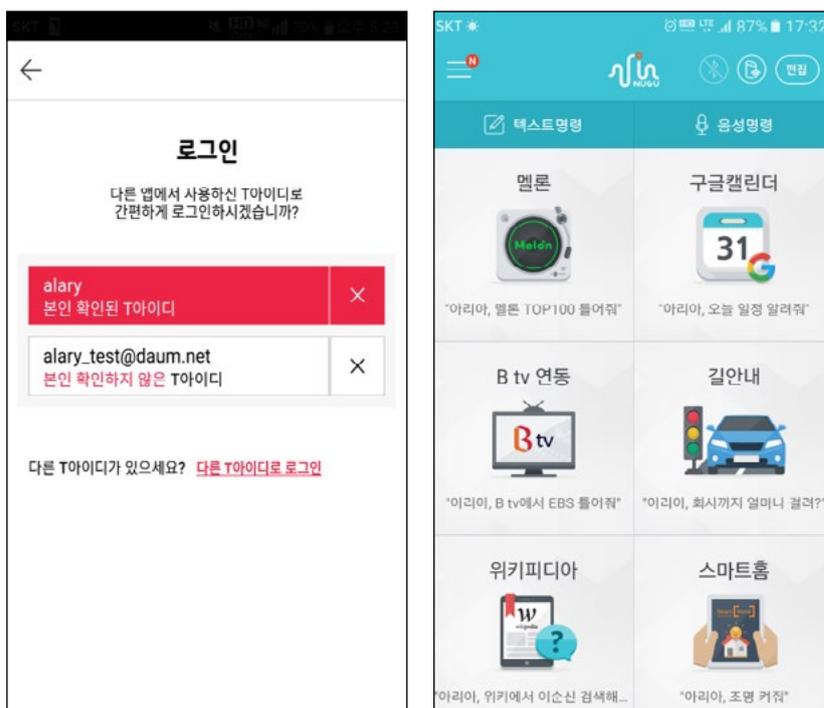
SKT is the largest mobile operator in South Korea serving 28 million of the country's 57 million subscribers. South Korea is a very digitally advanced market, ranking #1 in the Global Mobile Engagement Index.

As early as 2005, SKT launched T-Auth, an authentication solution that leverages the data captured in SKT's subscriber contracts to help online businesses ensure the accuracy of the information provided by their customers and the security of their accounts and personal details. By November 2016, T-Auth had 13 million monthly users making 650 million transactions annually with 27,000 service providers, including content providers and social media. T-Auth is now also offering two-factor authentication, using a SIM applet, to help secure mobile banking or gaming applications.

Launched in November 2015, T-ID is SKT's first universal identity product. It was designed to replace the fragmented authentication solutions employed by SKT's different services with one solution, provide SKT with a single view of the customer and reduce the customer friction and frustration of creating a new profile for each SKT service. As of November 2016, more than 11 million SKT subscribers were using T-ID, which was employed by 15 applications owned by SKT. Since then, new SKT apps have launched with T-ID (see Figure 1) and have experienced very rapid user take-up.

As of the end of 2016, T-ID had only been deployed on SKT-owned services. However, SKT intends for T-ID to ultimately compete with other identification solutions, such as Facebook, Kakao or Naver ID, employed by third party service providers. SKT believes integration with Mobile Connect - a global initiative - will increase the attractiveness of T-ID for external service providers.

FIGURE 1: AUTHENTICATION TO THE NUGU VOICE RECOGNITION SERVICE USING T-ID



# Why integrate with Mobile Connect?

As a global authentication initiative, Mobile Connect gives SKT the opportunity to expand the reach of its services to mobile subscribers around the world. Integrating T-ID and T-Auth with Mobile Connect enables foreign visitors to Korea to recognise and easily access SKT services and other compatible apps and websites in Korea – such as SKT’s online shopping mall 11Street.

At the same time, SKT wants to increase international usage of its own applications. Although some of SKT’s applications are only available to SKT subscribers, others, such as the T-map navigation service, are open to all internet users. The integration of T-ID and T-Auth with Mobile Connect would make it easier for people outside Korea to access SKT’s applications.

As Mobile Connect expands the reach and applicability of T-ID, SKT also expects third party applications and services to become increasingly interested in adopting the solution. The global user base and the technical interoperability delivered by Mobile Connect represents a simple and valuable solution for third party digital apps and services. In Korea, Facebook Connect, Naver ID and Kakao ID are the most popular identity solutions and the top choices for many online services. In summary, the global relevancy and reach of Mobile Connect have made it an attractive proposition for SKT. After careful consideration, SKT adapted T-Auth and T-ID to support the Mobile Connect specifications in December 2016.



# How to integrate with Mobile Connect

Although SKT's existing services and Mobile Connect are both based on the OpenID Connect standard, they use different profiles. The first step to becoming compliant was for SKT to add the OpenID Connect authorisation flow to the existing implicit flow used by T-ID. That change enables service providers to choose which OpenID Connect profile they prefer to employ depending on the use case.

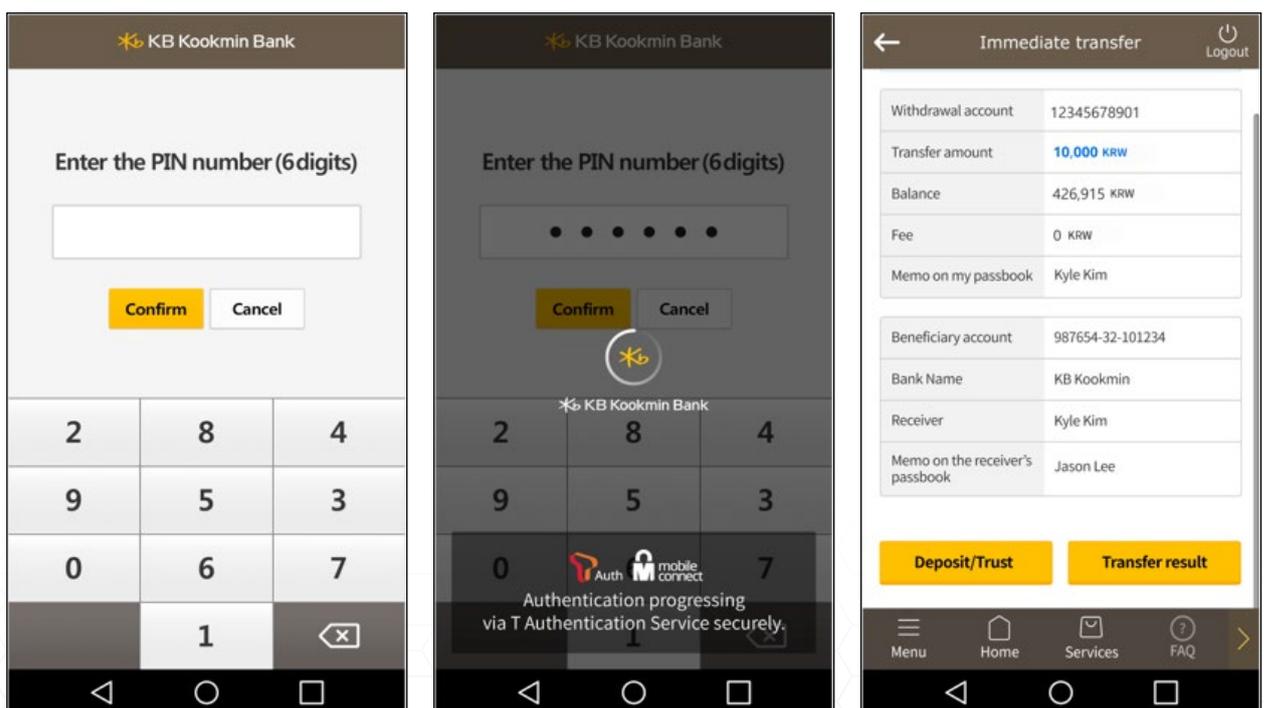
SKT achieved Mobile Connect technical compliance in early December following 11 weeks of development effort. By ensuring T-ID and T-Auth are entirely compatible with the global Mobile Connect protocol, SKT has made the services completely interoperable with the Mobile Connect-based systems used by other operators.

SKT also had to ensure that the terms and conditions for its offering comply with the Mobile Connect Privacy Principles, which require that the services be transparent, give users choice and control, minimise the data used

to fulfil the purpose and adequately protect customer information. SKT subsequently confirmed agreement to these principles. The combination of technical compliance and adherence to the Privacy Principles enabled SKT to be recognised as part of the Mobile Connect community.

For now, SKT is keeping the T-ID and T-Auth brands, as both are recognised by Korean consumers and service providers. The operator is giving service providers a choice as to which brand they want to use. As Mobile Connect is still mostly unknown in Korea, SKT expects most Korean services to use the existing Korean branding, while international services would opt for the Mobile Connect brand. Ultimately, SKT envisages the possibility of a dual branding for service providers who already offer both identity services and want to expand their reach. Figure 2 shows how Kookmin Bank's mobile transfer service is using both the Mobile Connect and the T-Auth branding.

FIGURE 2: MONEY TRANSFER ON "KOOKMIN BANK" MOBILE APP USING MOBILE CONNECT AND T-AUTH



## Conclusion and next steps

**Following the successful integration of its existing authentication and identity services into the Mobile Connect framework, SKT can now offer a global solution that benefits from international interoperability.**

**The next priority for SKT is to leverage the interoperability offered by Mobile Connect to continue adding more service providers – including global services. SKT believes this strategy will quickly increase brand awareness. The SKT team is also planning to implement T-ID on the services offered by SKT's affiliated companies during 2017.**

**Looking forward, SKT is considering adding authorisation – and ultimately identity – capabilities to the product portfolio, thereby addressing service provider demand for more specific use cases.**





## Sharing best practice

**Any improvements you have made to your deployment(s) which have translated into strong numbers?**

**We want to hear about your experiences – and with your permission, help you share them for the benefit of all operators working in the Mobile Connect ecosystem.**

**Please get in touch with our Mobile Connect team at GSMA, [mobileconnect@gsma.com](mailto:mobileconnect@gsma.com)**

To find out more about Mobile Connect, please visit [gsma.com/mobileconnect](http://gsma.com/mobileconnect)



## Identity

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