V4 Smart Platform – White Paper

Establishment of the "Visegrad Cooperation" (the Visegrad countries) common, interoperable and mutually accessible service platform by forming an intra-platform, unified digital "marketplace"

In the course of the 2016-2017 V4 Polish Presidency Program, at the CEE Innovators Summit on 28 March 2017, the prime ministers of the V4 member states adopted a joint declaration named the "Warsaw Declaration". In this declaration of intent, the prime ministers emphasized their commitment and intent of cooperation in respect of innovation and digitalization. As a result of the close cooperation, the competitiveness of the V4 region and the innovation capability of the countries may increase which contributes to the implementation of the digital transformation of the region. Furthermore, in the "Warsaw Declaration" was emphasized, that, in order to reach sustainable development, active cooperation between the modernization areas of the V4 member states (entrepreneur sphere, research and innovation) is very much needed. Implementation of Europe 2020 Strategy also forms part of the modernization endeavor, which on the whole contributes to start new undertakings and reach the appropriate quality-of-life. The Single Market of the European Union ("Single Market") is a further connection point because of the unified legal system, ensuring the free movement of persons, goods, services and capital and in the frame of in which common commercial policies are followed.

Continuing the endeavor started during the Polish Presidency Program in respect of digitalization, a project called "V4 Smart Platform" was elaborated in the "Digital Visegrad – Digitalization" subsection of the 2017-2018 Hungarian V4 official Presidency Program. In this chapter, the Hungarian V4 Presidency initiated an establishment of a common digital service platform, namely the "V4 Smart Platform".

This document serves the purpose to enhance the cooperation between the V4 countries in order to ensure, that the realization phase of the V4 Smart Platform project can continue with the active participation of the national coordinators (appointed ministries) delegated by the member states. This phase would also help involving the sectoral players into the process, as well as the project communication between the countries.

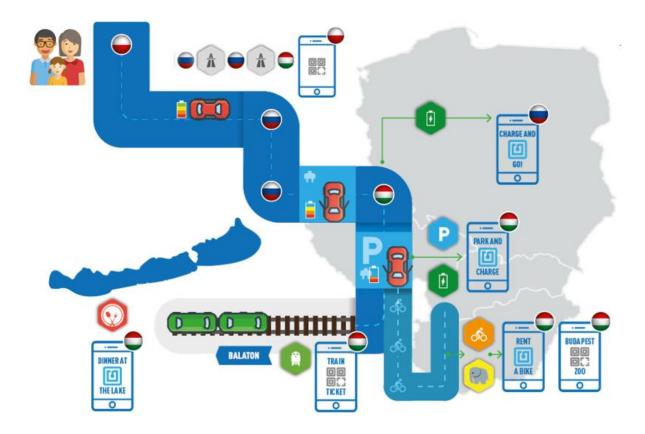
Purpose of Cooperation

The purpose of the establishment of the V4 Smart Platform is to support the professional and economic cooperation between the professional organizations and undertakings of the V4 countries, serving the mutual benefit of the participants and profiting from the synergies.

The following services were identified in respect of the electronic solutions serving the convenience of population and supporting the public administration that could be jointly introduced in the V4 countries and would be interoperable:

Ensuring interoperability between transport (mobility) services in a digital way (e.g. mobile parking, electronic highway vignette, infrastructure usage fees, electric car charger infrastructure, sale of electronic public transport tickets), i.e. the citizen of a member state shall be able to start mobile parking, pay for the charging of his electric

car, buy electronic highway vignette or electronic public transport tickets in any other member states through its ordinary, contracted provider via using the mobile application; application provider;



- Establishment of a unified touristic service platform (offers, identification, electronic services, registration and use of discounts), i.e. in case of touristic services, the interoperability would make possible in practice, that for example a Polish tourist may use the public transport in Budapest and pay for the accommodation in Bratislava or Prague with the same electronic tourist card, while the discounts provided in the given V4 country could be parameterized locally in relation to the services used.
- Establishment of a unified electronic and mobile payment service, i.e. the
 interoperability between the electronic and mobile payment service providers would
 make possible in practice that a citizen of any V4 member state would be able to do
 shopping and pay in any other V4 member state with the same customer comfort
 through his own service provider besides his domestic acceptance network.

Fields and Directions of Cooperation

A. Mobility sector

One of the main directions of cooperation in the developing mobility-service sector is to ensure the cross-border and a simple way charging of electric vehicles, which is one of the new, visionary and realistic alternatives of mobility. In addition, the goal is to integrate the new mobility services, such as "car-sharing" or "ride-sharing" into to public transport services to provide alternatives to satisfy individual mobility demands.

By supporting interoperability between (electro)mobility services, the cross-border travel demand could be satisfied with modern and environment-friendly transport technologies. In the course of the cooperation, the effective range limits of electric vehicles, the lack of the adequate charging network capacity, the appearance of different types of chargers or even the problem of interoperability between the given service providers shall be considered. The technological alternatives shall also be considered, such as using the services through the so-called "OnBoard Units" (OBU) installed in the vehicle.

B. Payment sector

Several successful mobile payment methods have been spread in the member states of the V4 region. A good example is the mobile payment system developed in Hungary, which is integrating the public services into a nationally unified payment system from 1 July 2014 enabling the dynamic spread of electronic payment.

The mobile payment system of the National Mobile Payment Plc. is contributing as an integrator, amongst others between the parking operators and the distributors, providing mobile payment services. This solution will also be suitable to ensure that the users can have an easy access to public transport and can use several different public transport services by buying one ticket. The cooperation between the member states shall also extend to the question whether and how the interoperability of the public transport ticket systems could be ensured to the citizens of the V4 region.

In order to form the V4 member states' integrated internal digital marketplace, common interoperable electronic payment solutions are necessary and standard interfaces providing open access shall be created. For the setup and spread of the Instant Payment Systems, an extensive cooperation between the B2B partners of the national platforms will be necessary.

In case of the cross-border services related to the V4 Smart Platform initiation, it was articulated as a basic principle that at first, the review and comparison of the mobile payment services currently available in the member states is necessary in order to define the cross-border services. At a later stage, those services shall be reviewed that will be introduced in the next 1-2 years. Thereupon, a V4 development "roadmap" could be compiled and the present and future service map could be visualized. The service map could be the basis to define the pilot projects based on the V4 Smart Platform.

C. Customer journey with the "data- based approach

The setting-up of the individual client profile, the real-time analysis, the prediction-based decision-making and the cloud-based solutions are important parts of the service development, as a result of which customized services can be delivered to the user. This is how the "customer journey" can be imagined: the traveler can have access to different discounts, when using different services offered by the touristic sector of the V4 region and it is feasible that discounts could be used the among the cities. The basic pre-condition of the afore-mentioned is the access to data: the purpose would be the establishment of an integrated platform that supports the complete "customer journey" (and the "end-to-end" marketing) process in the course of which, when defining interoperable services, the question of data access could be assessed.

D. Regulation

Regulatory environment of the member states should also be assessed in the frame of the cooperation in order to define and solve those legal bans that could potentially prevent interoperability.

E. Financing

The purpose of the professional community evolved as a result of the V4 Smart Platform is to identify those cross-border and interoperable services that would be launched as pilot projects in the V4 countries and which could be realized as a result of the cooperation between the states and the industrial players. In the already launched professional conversation the V4 development banks play an important role that could ensure the financial background of these projects. (This is one of the reasons why the Hungarian Development Bank Plc. was involved in the early phase of the project who as a first step of the cooperation, presented the V4 Smart Platform on a workshop in October 2017 organized for development financial institutions operating in the V4 region.)

Process of Realization

Realization of V4 Smart Platform project can enforce economic cooperation between the companies of the V4 member states and can open the possibility before the mutual introduction of their services. This, on the one hand, could enhance cooperation between the companies helping them to enter the external markets together and, on the other hand, could provide access for users to cross-border services in a simple and secure way.

The purpose of the V4 Smart Platform project is that the Professional Community of the V4 Smart Platform validate and start to implement the identified partner cooperation and pilot project proposals during the 2018-2019 Slovak V4 Presidency Program. Reviewing the source maps of the pilot projects in the frame of the cooperation with the above-mentioned development banks shall also form part of the validation process.

Further Recommended Steps

- Continuing the V4 Smart Platform project during the 2018-2019 Slovak Presidency Program.
- Establishment of member state harmonization in the frame of which those organizations (i.e. national coordinators) shall be appointed, who will represent their own country in the projects and will carry out organizing, coordination and contact keeping tasks.
- Determining the organizational structure necessary for the realization of the project and the establishment of these organizations (setting-up project companies with the membership of the coordinators).
- Elaboration of the frames of project financing by involving the national development banks.
- Continuous monitoring of the newest interoperable services between the member states.
- Commencement of the pilot project.