

## Objectives of the measure

- **At measure level:**
  - Modernize digital sales environment/ EFM module implemented
  - Increase attractiveness of digital sales channels
- **Contributing to city level objectives of:**
  - Reducing technical access barriers, hence promoting the use of sustainable mobility modes

## Description of the measure

- **Situation before:**

Currently, there are multiple sales channels in operation, both conventional as well as digital. There already is a variety of digital products available for different use-cases, ranging from digital monthly/ yearly passes to smartphone applications to buy conventional single-trip or daily passes as well as a crow-distance based check-in/ check-out system. On the other side, a large part of tickets sold until today are still conventional tickets printed on paper or provided as simple plastic cards. At the same time the recent introduction of a Germany-wide flat-rate PT ticket for 49 € per month (D-Ticket) will speed up the transition to more digital ticketing and enhancing the integration and interoperability beyond the borders of PT operators or transport associations.

- **General description:**

To provide our region and customers with all (upcoming) features and functions while ensuring nation-wide interoperability especially with regards to ticket inspection, rnv will implement major upgrade and extension to existing sales, billing, and settlement systems. The D-Ticket is based on the VDV-KA standard, featuring chipcards as well as smartphone applications as user media, featuring secure keys and certificates to prevent fraud. This upgrade of rnv's backend sales systems will enable us to ensure full interoperability of all D-Tickets sold by rnv as well as ensure a digital and secure ticket inspection process for all D-tickets, regardless of its origin. This measure will enable rnv to allow further customer groups to move from conventional/ analogue ticketing to a future-proof, interoperable and fully digital system.

- **Measure outputs:**

This measure will deliver:

- Implementation of an electronic fare management (EFM) module to the existing sales background system, ensuring full compatible to VDV-KA standard
- Increase the share of digital products sold in comparison to conventional products sold among the monthly/ yearly passes

- **Interaction with other city measures: UPPER and non-UPPER measures**

- None

## Target groups and/or geographical impact areas

- **Target groups:** The target group of this measure are the users of digital sales and information channels, who will receive an upgraded and more reliable digital services to support their daily mobility. Furthermore, it is expected to generate new users through the increased attractiveness.
- **Geographic impact area:** The measure will have effect on the service region of rnv and cover most of the metropolitan area of Rhein-Neckar with the three cities of Ludwigshafen, Mannheim, and Heidelberg.

## Stakeholders

The following stakeholders will be required for the implementation of this measure.

- Rhein-Neckar-Verkehr GmbH (rnv) - Department of sales & customer service: project lead & expert
- IT service provider – realizing improvements

## U-tools support

This measure will not be actively support by the IT tools of the UPPER toolkit.

## Link to other UPPER measures

This measure is similar to UPPER measures implemented in other cities, specially:

- HAN\_01: Digital infrastructure

## Process of implementation of the measure

Stages	Description	Intermediate milestones
<b>Design</b>	Collection of requirements, scanning of relevant business processes, market research on available solutions	<ul style="list-style-type: none"> <li>- all requirements collected</li> <li>- Market research completed</li> </ul>
<b>Preparation</b>	Preparing procurement process and relevant documents, tendering, and awarding process,	<ul style="list-style-type: none"> <li>- Procurement finalized</li> </ul>
<b>Implementation</b>	Technical implementation, testing, Go-Live	<ul style="list-style-type: none"> <li>- Implementation plan set</li> <li>- Implementation complete</li> </ul>

## Sub-measures and preliminary indicators

Measure	Sub-measure (if applicable)	Impact indicators
MAN_05	N/A	<ul style="list-style-type: none"><li>- Modernize digital sales environment/ EFM module implemented</li><li>- Increased share of sales through digital channels</li><li>- Increased user satisfaction with digital sales channels</li></ul>