Document Review – Comment Sheet

Document commented (name/version): TAP TSI: ANNEX B.12 - DIGITAL SECURITY ELEMENTS FOR RAIL PASSENGER TICKETING

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| Requestor: | Johan Hammar, Samtrafiken, Sweden |
| Deadline for submitting comments: | 2020-10-19 |

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|  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Reviewer 4 | Reviewer 5 |
| Date: |  |  |  |  |  |
| Name: |  |  |  |  |  |
| Organisation: |  |  |  |  |  |
| Email: |  |  |  |  |  |

*Document History*

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| --- | --- | --- |
| Version | Date | Comments |
| 0.1 | 2020-10-17 | First request |
| 0.2 | 2020-11-22 | Review by ERA |
| 0.3 |  |  |
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Conventions:

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| --- | --- |
| Type of Comment | Reply by requestor |
| G | General | R | Rejected  |
| M | Mistake | A | Accepted |
| U | Understanding | D | Discussion necessary |
| P | Proposal | NWC | Noted without need to change |

Review Comments <if necessary add extra lines in the table>

| N° | Reference(e.g. Art, §) | Type | Reviewer | Reviewer's Comments, Questions, Proposals | Reply | Proposal for the correction or justification for the rejection |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | Described solution | P | Fredrik Ljunggren | Samtrafiken suggests to take an interoperable approach to the electronic ticket format proposed in ANNEX B.12 DIGITAL SECURITY ELEMENTS FOR RAIL PASSENGER TICKETING by adding an abstraction layer around the tickets, effectively enabling bundling different types of electronic tickets into a common interoperable container format. This would allow for a ticket vendor to re-package and combine electronic tickets from different sources into an electronic booklet of tickets. The different tickets can be managed as opaque blobs, where metadata in the header would provide an index for any validating devices to locate the relevant part of the bundle.The approach requires some additional data into the resulting ticket bundle. However, we see from practical use of encoding ticket bundles using aztec, that ticket bundles consisting of data up to about 1k (+23% of error correction) can be reliable decoded from both backlit screens and paper printouts. However, SE also sees that use of near-field communiction (NFC) and low-energy bluetooth (BLE) is becoming increasingly popular, where significantly larger sizes can be quickly and reliably transferred between the bearer and the validator. For these reasons, Samtrafiken believes that the size constraints can be relaxed to accommodate the abstraction layer required.We would be happy to further discuss the technical details of a ticket container, the encoding of such and our experiences from using this type technology within the public transport sector in Sweden. | A | The technical solutions have been discussed with Samtrafiken. None of them is linked directly with the revised TAP TSI regulation, but with the technical document B.12. ERA proposed to treat the changes within the TAP TSI change control management for the existing TAP TSI technical document B.7.  |
| 2. |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |

*Note: This table could be changed according to the requestor’s needs*

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I accept that the comments I have submitted can be published on the ERA website along with: [x]  my name [x]  my e-mail address