

DRAFT TECHNICAL SPECIFICATION FOR THE PRODUCTION OF CONCESSIONARY TRAVEL PASSES IN ENGLAND

1. Introduction

- 1.1 This is a draft technical specification which local authorities may wish to use as a basis for their own procurement for the production of English Concessionary Travel Passes.
- 1.2 On 1 April 2008 free off-peak local bus travel anywhere in England was introduced for people living in England who are aged 60 and over or eligible disabled people. Previously, they could travel for free only in their local area.
- 1.3 As part of the changes, a new England-wide pass design was introduced so that bus drivers throughout England could recognise at a glance that a pass holder was eligible for free travel.
- 1.4 The Department for Transport has specified the design of the passes and that they must be ITSO compliant smartcards. The pass specifications are set out in the *Concessionary Bus Travel (Permits)(England) Regulations 2008* (SI No 417, 2008). These have subsequently been amended by the *Concessionary Bus Travel (Permits)(England) (Amendment) Regulations 2008* (SI No 2091, 2008).
- 1.5 All concessionary travel passes issued from April 2008 onwards, outside London, must meet the specifications set out in these Regulations. In London, Freedom Passes are initially being re-stickered with the rose logo. However, all London passes will need to comply with the England-wide specification by 1 April 2010.
- 1.6 Travel Concession Authorities (TCAs) are responsible for administering concessionary travel schemes in their area, and are responsible for producing passes. Many TCAs have joined together to form "schemes". In such cases, the responsibility to issue passes may have been delegated to a single lead TCA or an agent working on the scheme's behalf.
- 1.7 Whilst all TCAs are responsible for producing ITSO compliant passes, very few are ITSO members or have access to their own HOPS. To allow these "non-ITSO smart" TCAs to produce passes, the Department is funding a company called ITSO Services Ltd (ISL) to carry out most ITSO functions on their behalf.

- 1.8 In 2006, the Department put in place a number of Framework Agreements which TCAs could use to produce their passes. These helped to ensure that TCAs could issue new passes to all concessionaires before the start of the England-wide concession. These Framework Agreements will come to an end in September 2009 and no new call-off contracts will then be possible.
- 1.9 Following the end of the Framework Agreements, TCAs will need to make their own arrangements for pass production. **They may wish to use this technical specification as the basis for their own procurement, though we would recommend that they should adapt it to meet their particular circumstances.**

ITSO Services Ltd (ISL)

- 1.10 In order to produce ITSO compliant smartcards a TCA would normally need to become an ITSO Member and obtain a back office system (known as an AMS-HOPS) to deal with all electronic transaction data and smartcard product keys etc. However, in order to remove from TCAs the burdens associated with this, the Department is funding a company called ITSO Services Ltd (ISL) to carry out these and other functions on behalf of non-ITSO smart¹ TCAs.
- 1.11 ISL is a not for profit company wholly separate from ITSO Ltd. Its purpose is to provide services to TCAs who need to produce ITSO compliant concessionary travel passes but who are not currently ITSO smart, which is most TCAs at present.
- 1.12 ISL is providing the following services to TCAs who “sign up” with ISL:
- ITSO Membership – ISL will secure and maintain ITSO membership on behalf of the TCAs.
 - Licensed Operator – ISL will obtain and maintain ITSO licensed operator status on behalf of the TCAs.
 - User Support and Guidance - ISL will provide a comprehensive range of Support and Guidance to the TCAs.
 - ISAM Provision - ISL will source, personalise and distribute ISAMs to each TCA’s selected pass service bureau(s) (see section on Provision of ISAMs starting at paragraph **Error! Reference source not found.**).

¹ In this Specification, "ITSO smart" means a TCA which is a member of ITSO and has the necessary HOPS provision to be able to deal with ITSO data transactions (either on its own or in a scheme with other TCAs).

- Asset Management Service – ISL will provide an overlay of security through the direct management of distributed assets (e.g. ISAMs) so that the environment within which the TCAs work is protected.
- Concessionary Transaction Collection and Depository – ISL will store transaction data for each TCA for a maximum of seven years and will migrate this data to the TCA once the TCA has established its own smart scheme.
- Hot List Processing - ISL will implement the agreed hot-listing strategy for the England-wide concession, for both smart and non-smart TCAs (see section on Stoplisting/Hotlisting starting at paragraph **Error! Reference source not found.**).
- Customer Help Desk - ISL will operate a helpdesk within the hours of 9am to 5pm Monday to Friday (excluding English bank holidays) providing support to TCAs who have queries about ITSO and ITSO processes.

2. Fundamental requirements

Pass design

- 2.1 Passes must comply in all aspects with the Department's published design specification as set out in the *Concessionary Bus Travel (Permits)(England) Regulations 2008 (SI No 417, 2008)* as amended by the *Concessionary Bus Travel (Permits)(England) (Amendment) Regulations 2008 (SI No 2091, 2008)* and any further legislation relevant at the time at which the passes are produced.
- 2.2 The Regulations set out the position and format of the standard elements of the pass - the holder's photograph, their name, the expiry date, the hologram, the unique identifying number, the ITSO logo, the rose logo, and the ribbon background. They also require passes to be ITSO compliant smartcards.
- 2.3 All concessionary travel passes issued from April 2008 onwards, outside London, must meet the specifications set out in these Regulations. In London, Freedom Passes are initially being re-stickered with the rose logo. However, all London passes will need to comply with the England-wide specification by 1 April 2010.

ITSO Specification

- 2.4 Passes shall have a contactless smart card interface and be manufactured and issued in accordance with the ITSO Specification to ensure interoperability of the passes across England when used 'electronically'.
- 2.5 This Technical Specification does not go into detail with regard to the ITSO specification, other than to give an overview of the requirements. Details of the ITSO specification can be found at www.itso.org.uk along with information about how ITSO operates, including the Certification and Licensing procedures.
- 2.6 Version 2.1.3 of the ITSO specification is the minimum for supporting English National Concessionary reimbursement messaging, so 2.1.3 or later should be used.
- 2.7 As well as encoding passes to the ITSO specification and the Department's standard design, the passes shall also conform in all respects to the ITSO specification requirements. All supplied cards shall be of a type approved and

certified by ITSO and all supplied equipment shall be fully compliant with the ITSO specification and also be fully certified by ITSO.

3. SERVICES

Overall Requirements

- 3.1 All passes shall be manufactured and issued in accordance with the ITSO Specification.
- 3.2 Each pass will be coded with the ITSO Shell and as many ITSO Products (IPEs) as are required to deliver both the England-wide entitlement (age-related/disability-related as appropriate) as well as any concessionary enhancement offered locally by a TCA (eg for additional peak or evening periods or additional modes besides buses).
- 3.3 In addition, passes shall be issued with the 'National STR' placeholder IPE. If requested by the TCA they shall also be issued with a local TYP2 STR and, where relevant, TYP0 IPE to facilitate future multi-application.
- 3.4 Any pass producer that does not comply, or only partially complies with the requirements of the ITSO specification, shall be deemed non compliant. All relevant equipment and software shall be fully compliant with the requirements of the latest Version of the ITSO specification, plus any specific ISADs approved by the ITSO Board after publication, or any current later versions of the ITSO Specification.

Unique Identifying Numbers (OIDs and CPICCs)

- 3.5 In order to allow TCAs the freedom to implement their concessionary travel services either independently or by grouping with other TCAs into schemes, unique OIDS have been allocated to each TCA or TCA-group 'Scheme' for use in identifying shell and product ownership.
- 3.6 Also, the ITSO data element "Concessionary Pass Issuer Cost Centre", referred to as CPICC throughout this Technical Specification, has been used to allocate a unique cost centre reference number to each TCA (including each individual TCA within a group).
- 3.7 For the England-wide concession:

- each TCA has its own CPICC
- each TCA or Scheme has its own Product OID
- each ITSO smart TCA or Scheme has its own unique Shell OID
- each TCA which is not ITSO smart and which uses the services of ISL has a standard Shell OID, number 0100 or 0110.

3.8 The list of OIDs and CPICCs is owned by ITSO Ltd and they are responsible for controlling the list. An up to date list is available on the ITSO web-site at www.itso.org.uk

3.9 These OIDs and CPICCS will need to be encoded on the chip inside all concessionary travel passes. Passes must not be issued with OIDs/CPICCs that are not on the authorised list. We recommended that all pass producers should cross reference the information supplied by TCAs against the list of OIDs and CPICC published on the ITSO web-site at www.itso.org.uk as part of their QA process.

3.10 It should also be noted that PTYP, Entitlement Code (controlling acceptance periods) and Concessionary Class are also critical items of coding to be followed carefully by reference to the list. We strongly recommend that passes with additional entitlements have these encoded electronically to allow smart readers to be able to differentiate them and to prevent the need for passes to be replaced in the event of a scheme becoming smart.

Provision of data between TCAs and pass producers

3.11 The pass production service is required to deliver end to end production of passes from a range of input data from a number of sources, including, but not limited to:

- Electronic Data from TCAs in the Department recommended format (see Annex A)
- Electronic Data from TCAs in proprietary format containing as a minimum the data elements specified by the Department as the basic requirement
- Paper based forms with applicant's photo attached provided by TCAs
- A combination of the above paper and electronic solutions.

- 3.12 Alternatively, TCAs may require pass producers to gather data on concessionaires.
- 3.13 Any specific pass issued must be traceable to the batch and data-record of origin via the log of records supporting the manufacturing process, together with evidence of passes subject to quality control failure measures (eg re-print, recode, pass destroyed etc).
- 3.14 An electronic data record shall be provided back to the TCA suitably updated to show which pass has been issued to which applicant in terms of linking electronic and printed serial numbers and meeting the ITSO specification as to data-encoding and data-messages.
- 3.15 It is a requirement, as a minimum, to hand over passholder data to the TCA (and it is not deemed to have been handed over until acknowledged as received) once every pass-production working day in the minimum XML or CSV data-requirement format as specified by the TCA. This is in addition to fulfilling the ITSO-messaging requirements where pending transmission of messages, all data-records shall be stored on the Perso POST SAMs and not deleted until safely acknowledged by the designated HOPS. Data covered by the requirements of the ITSO specification shall be transferred via the POST/HOPS interface, and not separately via any other (proprietary) link.
- 3.16 There is no obligation to provide the XML/CSV copies of the data where the pass production system automatically populates a passholder database of the TCAs own choosing procured separately by the TCA or provided by the pass producer. However it is a requirement when providing such data as an extract (rather than directly populating a database) to provide it in the specified interchange format (or in a format as otherwise agreed between the pass provider and the TCA) as long as the solution is endorsed by the relevant TCA and at no extra charge.
- 3.17 These requirements are stipulated to ensure that a TCA handling their own queries, perhaps including replacement of lost/stolen passes from their own hardware, are able to do so using a synchronised, contemporaneous passholder database even while the bulk pass production service is ongoing.
- 3.18 This minimum data-interfacing requirement associated with pass production and described in the above paragraphs is separate from, and additional to, any full ongoing database management service contracted by TCAs.

Card Media Types to be Supported

3.19 The ITSO specification includes the following card media types:

- Generic Microprocessor (including JCOP31 and JCOP41)
- Mifare Ultralight
- Innovision Jewel
- Oyster
- Mifare DESfire
- Calypso

3.20 For the purpose of this Technical Specification, the following ITSO card (CMD) types are valid choices for TCAs:-

- Generic Microprocessor (CMD2 including JCOP31 and JCOP41 variants thereof, for example)
- Mifare DESfire (CMD7)
- Calypso (CMD8)

ITSO Products to be Supported

3.21 The ITSO specification includes the following product types:

- TYP0 Private IPE
- TYP2 Stored Travel Rights for national & local use
- TYP3, TYP17 Loyalty
- TYP4, TYP5 Charge To Account
- TYP14, TYP16 Entitlement & ID
- TYP22, TYP23, TYP24 Travel Tickets (full size media)
- TYP25 Travel related voucher
- TYP26 Open System Tolling

- TYP27, TYP28, TYP29 Travel Tickets (small memory media)

Minimum IPEs to be Supported

3.22 Of the IPEs listed above, the following IPEs shall be included at pass production:

- TYP0: A private IPE may be required by some TCAs in order to support non transport or legacy smartcard applications. The details of any such products will require the pass providers to agree technical details directly with any TCAs that have such a requirement;
- TYP2: ITSO mandate that all full sized (ie not small memory) passes shall contain the National Stored Travel Rights (STR) product as a 'placeholder' to reserve pass-space. A local TYP2 may also be required in addition to the national placeholder by TCAs and in this case this will be provided by the pass provider as required;
- TYP14: This IPE will be included where the pass holder has qualified for an extra local 'companion' concession so that it can work in the 'home' area for the additional companion but NOT elsewhere, or where the TCA requires an additional local concession to be provided explicitly in the form of an additional product, rather than relying on differentiating the concession by means of the CPICCs in the TYP16;
- TYP16: This IPE will be included on all passes and contains the English National Concession Product and should be coded according to the OID/CPICC list.

ITSO Log Requirements

3.23 Passes shall be encoded such that that the pass's last directory entry is reserved for use as an ITSO Log and that 2 sectors are reserved for the cyclic or so-called 'normal log' use.

Perso ITSO Secure Access Module [ISAM] Requirements

3.24 For TCAs using ISL services, the pass provider will not be responsible for the provision of Perso ISAMs for the purposes of enabling smart card issue.

3.25 Pass providers will require the necessary privileges to be assigned to them by the appropriate TCAs (ie Shell and IPE create capabilities) or their Agent.

Data Storage and Forwarding of Shell and Product Creation Records

3.26 Independent of any proprietary data storage methods that pass providers may utilise, pass providers shall use the ITSO loss-less data storage and transfer method. For guidance the following functions are particularly relevant to this requirement:

- All creation records shall be stored within the Perso ISAM.
- All creation records shall be promptly despatched to the HOPS either using an always-connected link or by at least once hourly polling.
- No creation record is to be deleted until proper acknowledgement is received from the HOPS.
- The Perso ISAMs shall be capable of receiving ITSO update messages and lists (as specified within the ITSO specification) and applying them in situ without special engineering processes. In particular, in the event that not all TCA product variations have been agreed at the time production commences or minor amendments are required to IPE embodiments, it shall be possible to apply the resulting ITSO update frames without disruption to the pass production process and at no additional cost.
- The pass production equipment shall, in conjunction with the Perso ISAM, be able to generate messages detailing passes that have failed at some point during the production process. These messages are required to be transmitted to the HOPS for the purpose of marking the appropriate HOPS database entries and, where necessary, adding the pass details to the HOPS maintained hot-list.

Supply Of Test Passes & Pre-production Audit Process

3.27 Prior to the start of bulk pass production it is a requirement that a set of sample passes shall be supplied to the TCA or its agent in order to confirm that the Shell and IPE Embodiments are correctly encoded and the design specifications met. Likewise, throughout production, sample passes may be requested for inspection. All such passes shall:

- Be supplied at the pass provider's cost
- Be produced using live English Concession keys, and any 'local' TCA keys in the event of an extra TYP0, TYP14 local concession or TYP2 local STR being supplied.

- Use 'synthetic' ID data and photos (possibly supplied)
- Be overprinted SAMPLE – NOT VALID FOR TRAVEL across picture and personal details

3.28 The passes thereafter may be kept by the TCA or its agents

3.29 Also before the production run starts, the minimum 'set' of sample passes will be made up and printed with correct TCA and scheme identifiers, including printing of the reverse of the pass. These will comprise of:

- A pass for each TCA (including for each TCA within a TCA Group) coded for the Age concession
- A pass for each TCA (including for each TCA within a TCA Group) coded for the Disabled concession
- A pass for each TCA (including for each TCA within a TCA Group) that includes an extra local concession (TYP14 IPE) or local TYP2 STR where this is required.

3.30 Where a TCA requires the passes to be personalised with additional printing over the required minimum on the reverse and coding (such as addition of library entitlements), additional test passes may be required. These test passes shall be supplied to the parties as nominated by the purchasing TCA.

Pass Failure At Issue Time – Notifying The HOPS

3.31 For passes that are produced but, at some time in the issue process, are detected to be in some way faulty, and if some or all of the ITSO creations records have been posted to the ISAM, a message or sequence of messages shall be sent to the HOPS to indicate that a pass has been created that needs to be marked as not in use and, if appropriate, to allow the pass details to be placed in the HOPS hot-list. Pass providers shall ensure that such passes are destroyed and their records removed from the hot-list.

3.32 All passes shall be warranted free of manufacturing defects and be printed and encoded fully in accordance with the ITSO specification and the requirements of this Technical Specification.

3.33 In the event of large scale failures in-service after distribution (exceeding 0.5% of live passes per order per annum), and failure for a particular

batch/production run exceeds 1%, the TCA may employ the services of a mutually agreed independent test-house to arbitrate as to the cause of failure. Where this is deemed to be the responsibility of the pass provider (as opposed to abuse of the pass in use), the pass provider shall replace all passes from that batch free of charge. The test-house will also establish proportionate responsibility in the case of multiple cause and allocate cost responsibility for replacement between TCA and the pass provider accordingly.

3.34 Where failure rates exceed 2%, arbitrated to be a result of a manufacturing defect, the pass provider shall also pay for the costs of the test-house in determining this. Alternatively the pass provider may instead elect to pay for and provide pass replacement into the hands of the user without recourse to testing at the test house in regard to this arbitration procedure.

Batch Control

3.35 The TCA or group of TCAs may supply one or more batches of passholder details either in electronic or paper form. An auditable method of managing these supplied batches is required including a method of data verification as detailed within this Technical Specification (in Annex B).

3.36 Batch control requires that an indication of the start and end Unique IDs for the supplied database is known and is subject to appropriate checks, eg

- Check that the batch's first record Unique ID matches the stated batch start number indicated.
- Check that the batch's last record Unique ID matches the stated batch end number indicated.
- Confirm that the correct number of records is present.

Despatch of Passes

3.37 A range of items and options associated with pass production are also required from the pass provider, including:

- Supply of complete batches to the TCA
- Immediate supply of passes directly to applicants

3.38 Pass producers must ensure that all passes sent directly to applicants include a return address on the envelope in case they can not be delivered. The return

address, and procedures for dealing with returned passes, should be agreed between the TCA and pass provider.

Options

3.39 Pass providers are required to support basic pass production and additional costs (or deductions shown as negative amounts) for a number of options including:

- Discounts by volume ordered
- Application Forms
- Cost of including a covering letter (if not supplied by TCA) and/or pass-carrier
- A scheme leaflet insert – of the nature ‘how to use and where you can use your pass’ (possibly including its production)
- Wallet option
- Delivery cost options.

Pass Production From Electronically Supplied Data

3.40 The Department has recommended that TCAs collect a Minimum Set of data that is stored in their databases as set out at Annex A. In addition to the minimum set, it has recommended a format for collecting additional data should a TCA have a need to collect this data. TCAs are, of course, free to hold their data in a different format if they so wish as long as it meets the minimum requirements of data-content.

3.41 Pass providers will need to have import software that can achieve the following functions:

- Check for the photograph file, validate it, cross-check to the database record, and import it (some TCAs have used this step to quality assure current photographs and seek replacements where they are of poor quality or several years out of date)
- Perform data verification to confirm the presence of all mandatory data items plus, where appropriate, checking the range and format of all data items where this is possible (e.g. Post Code checking).

- Produce exception reports for data entries that fail the data verification process.

Database Update, Export and Return

3.42 For the returned records, the ITSO data and CMS data shall be updated accordingly as per this Technical Specification and any variation due to existing legacy TCA database requirements.

3.43 As part of the pass issuing process the Pass provider shall ensure that the pass serial number (which may be a Unique Customer Reference Number (UCRN), as printed on the pass and as encoded within the pass's shell (made up of IIN, OID, ISSN and CHD) is appended to the database entry for each pass produced along with the issue date. When the batch of passes corresponding to the supplied database has been produced the Pass provider shall ensure that the updated database be extracted and returned to the owning TCA as 'proof' of pass production-completion per batch. The format of this export shall conform to the 'Minimum Set' or 'Best Practice Set' as appropriate. TCAs who did not supply their database in one of these two formats will have to perform their own import conversion but the additional data shall be reasonably defined 'in clear' [i.e. ASCII text or numeric].

Pass Production From Forms

3.44 Some TCAs will elect to provide their passholder data in the form of application forms. Such forms may be completed by the concessionary applicants themselves and authorised by TCA officers, or third parties such as Post Office Counters, libraries or a member of the medical profession in the case of disabled persons. It will remain the responsibility of the TCA to verify that the applicant is entitled to the concession, unless negotiated as an additional cost as part of the data-capture service.

3.45 There is a requirement for the manual, or preferably automated, transcription of the form, plus attached photograph, into the pass management database for pass production purposes. Once the data has been captured it shall be committed to the data verification process as outlined above.

3.46 Also, even though the passholder database was not supplied in electronic format, when the passes have been produced an export of the database, in the format agreed with the TCA, shall be delivered to the TCA in all cases on a cost-inclusive basis.

Service Levels

3.47 The required levels of service to be taken into account for pricing are:-

- mail opened on day of receipt
- batches opened to log work commenced by end of same day (Day 1)
- passes then issued and despatched by end of working day 3
- Replacement passes (e.g. for passes which are lost) must be issued and posted out 1st class (or equivalent) on day of notification, if received by 12 noon, or if not, sent out the following working day

Data Capture Support Service

3.48 For TCAs where there is no current support for Concessionary Travel database management (electronic or otherwise) they have the option to procure from the pass provider a data capture service.

Housekeeping and Disaster Recovery

3.49 Pass providers shall include a Backup, Archive and Disaster Recovery provision for their Pass Production Service

Any other related service

3.50 Pass providers may also offer other services that are related to the core requirements of the above service. Such services shall be fully described and include details of the staff who will provide the service. This shall include (as appropriate) for each person offered:

- Title/Grade
- Skill-set/Functions fulfilled
- Daily Rates (or rates per grade for teams)
- Availability
- CVs

ANNEX A – NATIONAL CONCESSION PASS DESIGN

Pass Image



Front of Pass

England's concessionary bus travel pass is identified consistently by an English rose and a red ribbon. The Travel Concession Authority (issuing body) logo will appear in the top right hand section of the pass as shown. There may be more than one logo and other information at the local authority discretion in this area.

The photograph of the pass holder is located in the bottom left hand corner. A hologram will be required as a security feature to guarantee authenticity and to reduce fraudulent copy.

To the right of the photograph will be the expiry date, the pass holder's name and pass number. The words 'Concessionary Travel funded by HM Government with your local authority' run across the bottom of the pass.

The concession type is indicated by the coloured strip down the right hand side of the pass and there are two variations: blue for senior citizens and orange for those with disabilities. The ITSO logo appears at the bottom right of the pass.

The base artwork for the passes and the holograms are both supplied by the Department to pass producers. The Department also provides guidelines for production of passes to supplement the Regulations set out in in the *Concessionary Bus Travel (Permits)(England) Regulations 2008* (SI No 417, 2008) as amended. Pass producers should ensure that they meet the terms of the Regulations and guidelines.

Reverse of Pass

As a minimum, each Travel Concession Authority is required to provide a contact telephone number to be printed on the reverse of the pass. In addition, a reference to the terms and conditions of the local scheme is required. This is expected to take up only a small proportion of the reverse of the pass.

All additional reverse of pass printing, to align with any existing TCA corporate branding, or additional pass personalisation, such as the addition of bar codes for library pass usage is a discretionary requirement of the TCA.

ANNEX B – NATIONAL CONCESSION ITS0 ENCODING AND DATA REQUIREMENTS

Introduction

This Annex sets out the guidance that has been provided to TCAs for supplying concessionary travel databases to smartcard personalisation bureaus in order to issue English Concession Smartcards. It should be used to provide guidance as the basis for pricing and procedural options for Tenderers. However, it is a Technical Specification requirement that Pass providers will need to accept data in other formats from TCAs wishing to use the Framework Agreement.

The following describes two database formats:

- The DfT Minimum Data Set
- The DfT Minimum Data Set with a range of Additional Best Practice Items

TCAs that opt to use either of these formats shall supply their data in the format described in this annex otherwise additional cost may be incurred for database conversion. A number of the Additional Best Practice data-items may be left blank where these are not used nor required by the TCA.

These formats have been deliberately designed to implement using commonly available Microsoft packages such as Excel or Access. The database fields have been specified to be in clear ASCII text so that they are clearly readable by non specialist IT staff. However, it is up to the TCA to determine how data is collected and they may elect to obtain or construct a more sophisticated software package for generating the database.

Database Exports From TCAs That Have Existing Electronic Databases For Concessionary Travel

An export of the database should, wherever possible, be made in XML format. Where it is not possible to output an XML file, a CSV formatted file shall be produced instead.

All data should be in the form of ASCII strings or characters and shall be ordered in one of the following ways:

The DfT Minimum Data Set

Data requirement	Format	Number of characters	Notes
CPICC	Text string	5 ASCII Characters	Number should be right justified with leading zeros as required.
PassHolderNumber	Text string	8 ASCII Characters	Number should be right justified with leading zeros as required. Together with the CPICC number above, these make up the UniqueReferenceNumber.
FirstNameOrInitial	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
Surname	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
HouseOrFlatNumber OrName	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
BuildingName	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
Street	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
VillageOrDistrict	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
TownCity	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
County	Text string	Maximum 39 ASCII Characters	Text should be left justified, no commas
PostCode	Text string	8 ASCII Characters	Correct structure should be: LN NLL; LNN NLL; LLN NLL; LLNN NLL; or LLNL NLL. There should be a space in front of the last three characters. Where post code is less than 8 characters (including the space) additional spaces should be included at the end.
ExpiryDate	YYYYMMD D	8 ASCII Characters	Written as YYYYMMDD
Photograph	Jpg photograph file or hard copy	16 ASCII Characters	Jpg file names should be UniqueReferenceNumber.jpg. (i.e. CPICCPassHolderNumber.jpg) Hard copies should have UniqueReferenceNumber on reverse.

TypeOfConcession	"a" or "d"	1 ASCII Character	(upper or lowercase)
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Recommended format for addresses

Data requirement	Format	Number of characters	Notes
HouseOrFlatNumberOrName	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
BuildingName	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
Street	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
TownCity	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
County	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
PostCode	Text string	8 ASCII Characters	Correct structure should be: LN NLL; LNN NLL; LLN NLL; LLNN NLL; or LLNL NLL. There should be a space in front of the last three characters. Where post code is less than 8 characters (including the space) additional spaces should be included at the end.

Best Practice Additional Data Options

Data requirement	Format	Number of characters	Notes
Title	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
MiddleNames	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas
TelephoneNumber	Text string	16 ASCII Characters	Numbers should be left justified – with trailing spaces as required.
TelephoneNumberType	"h", "w" or "m"	1 ASCII Character	(upper or lowercase)
EmailAddress	Text string	Up to 39 ASCII Characters	Text should be left justified, no commas or spaces.
Gender	"m", "f" or "u"		"m" – male

			"f" - female "u" - unspecified (upper or lowercase)
DateOfBirth	DDMMYYYY	8 ASCII Characters	Written as DDMMYYYY
DisabilityType	"n", "a", "b", "c", "d", "e", "f", "g"	1 ASCII Character	"n" - not further specified "a" – Blind or partially sighted "b" – Profoundly or severely deaf "c" – Without speech "d" – Long term disability/injury preventing ability to work "e" – No arms or lack of use of arms "f" – Has a learning disability "g" – Unfit to drive due to physical disability (upper or lowercase)
CompanionAllowedLocally	"y" or "n"	1 ASCII Character	(upper or lowercase)
ConcessionTradedForAlternative	"y" or "n"	1 ASCII Character	(upper or lowercase)
TradedFor	"t", "r"	1 ASCII Character	(upper or lowercase) "t" = tokens & "r" = railcard

Exporting data from databases

The extracted database should be given a name which starts with the CPICC number allocated to the district in text form followed by the word "extract".

eg (where CPICC= 12345) and entries 0 to 122399 are included:

12345extract00000000_00122399.xml

or

12345extract00000000_00122399.csv

Each entry in the database will contain the filename of a photograph. A matching photograph file will be required and these should be contained in a folder. The convention for the folder name is:

Database entries	Folder name
00000000 – 00000499	photos0
00000500 – 00000999	photos500
00001000 – 00001499	photos1000

00001500 – 00001999

photos1500 etc.

Return Of Database From Card Bureau To Local Authority After Pass Issue

It is intended that each submitted database will be returned with two previously blank columns populated – Pass Issue Date and Printed Pass Number, as well as the originally submitted data. These will be presented in XML or CSV format upon request.

ANNEX C – GLOSSARY AND DEFINITIONS

Batch	A collective sequence of events – usually referring to a series of pass applications grouped under an identity ‘header’ where each pass application or data-item is a pass ‘detail’. Also refers to a group of passes to be issued together, because they are of similar type or were requested together; important for tallying output counts to original input request
Passholder	The person in possession of the pass, who may be a concessionaire
CHD	Check Digit
CMD/Card	Smart Card ‘Customer Media Definition’. A Card is the physical media on to which the Pass is added.
CPICC	Concessionary Pass Issuing Cost Centre
Cyclic Log	The normal log on a smart card used to store transient tickets, when details of a journey need to be recorded on the card
HOPS	Host Operator Processing System, colloquially known as the back office for the ITSO specification
HSAM	HOPS Security Access Module
IPE	ITSO Product Entity, a template definition of a ticketing product to be stored in the ITSO Shell
ISAD	ITSO Specification Amendment as approved by the ITSO Board and the Department
ISAM	ITSO Security Application Module (usually as used in a POST if not referred to as a Perso ISAM or HSAM) used to hold keys and encrypt/process/store messages e.g. pending transmission to the HOPS or on receipt from it
ISMS	ITSO Security Management Service where products are registered and secure keys produced for routing via a schemes AMS-HOPS to POSTs
ISSN	International banking standard card numbering master

ITSO	ITSO Ltd, formerly Integrated Transport Smart Card Organisation
Key	Cryptography to secure smart card products and messages, usually diversified with the card number to guarantee uniqueness
Media	Usually the CMD or smart card
Mifare	Proprietary smart card type [Philips]
OID	Operator Identity/Identifier
Pass	The England Concessionary Travel Pass, which will reside on the Card.
Perso ISAM	ITSO Security Application Module capable of Personalisation (i.e. creating ITSO Shells on CMDs)
POST	Point of Service [or Sale] Terminal e.g. a Bus Electronic Ticket Machine (ETM), vending device, point of sale
Scheme	The single or multiple groupings of TCAs to form a local scheme. A Scheme may also be the TCA.
Shell	Special term for the ITSO application containing the directory entries and ITSO products etc
STR	Stored Travel Rights – ITSO’s definition of stored value [IPE TYP2]
TCA	Travel Concession Authority – the local government authority responsible for administrating Concessionary Travel. A TCA may also be the TCA.
The Department	Department for Transport
TYP	The ticket template type defined by ITSO (e.g. Identity, Travelcard, Carnet)

ANNEX D – SUPPLIER INFORMATION PACK

Attached as Excel File