QUALITY RESULTS AND THEIR INTERPRETATION

1 Introduction

In the quality assessment, the elements of the data object being studied are compared to elements of a reference object. Possible targets of assessment include numerical values of elements (1, 184, 35009, etc.), truth values (yes / no), attribute data (e.g. street name) or location data (e.g. location of public transport stop).

This quality report presents results on the quality of Digiroad data objects which have been compared to the NLS Topographic Database (reference = source material of data object) and the road register of the Finnish Transport Agency. Quality reports will be published together with subsequent Digiroad publications.

The result of the quality assessment is reported as a DQL value which indicates the frequency of errors in the object being assessed when compared to corresponding objects in the reference material. The unit of the DQL value is %.

DQL = Declared Quality Level

2 Summary of Digiroad Quality Results

DATA OBJECT	AREA	REFERENCE	TARGET OF ASSESSMENT	DQL (%)
Road name	Finland	Complete TD (13 Jun 2011)	Thematic accuracy: Incorrect road name	0,000
Address numbers	Finland	Complete TD (13 Jun 2011)	Thematic accuracy: Incorrect address number	0,001
Direction of traffic flow	Finland	Complete TD (13 Jun 2011)	Thematic accuracy: Incorrect direction of traffic flow	0,009
Traffic elements	Finland	Complete TD (13 Jun 2011)	Completeness (missing)	0,002
Traffic elements	Finland	Complete TD (13 Jun 2011)	Completeness (extra)	0,011
Road address	Finland	Road register (May 2011)	Thematic accuracy	0,47
Road address	Finland	Road register (May 2011)	Completeness (missing)	1,48

Maximum total weight allowed for a vehicle	Finland	(May 2011)	Completeness (missing)	0
Maximum total weight allowed for a vehicle	Finland	(May 2011)	Completeness (extra)	0
Maximum weight per axle allowed for a vehicle	Finland	(May 2011)	Completeness (missing)	3,8
Maximum weight per axle allowed for a vehicle	Finland	(May 2011)	Completeness (extra)	0
Maximum weight per tandem-axle allowed for a vehicle	Finland	(May 2011)	Completeness (missing)	1,32
Maximum weight per tandem-axle allowed for a vehicle	Finland	(May 2011)	Completeness (extra)	0
Maximum total weight allowed for an articulated vehicle	Finland	(May 2011)	Completeness (missing)	3,16
Maximum total weight allowed for an articulated vehicle	Finland	(May 2011)	Completeness (extra)	0
Public transport stops on class 1 main roads	Finland	(May 2011)	Completeness (missing)	0,664
Public transport stops on class 1 main roads	Finland	(May 2011)	Completeness (extra)	0,986

3 Interpretation of Results

Road or street name:
In Digiroad data, the frequency of incorrect values in the road or street name data object is 0.000%. The data object was compared to the NLS Topographic Database (Reference data = Update message from TD) (timestamp 13 June 2011). Total amount of reference data is 2 643 909 elements.

Address numbers:
In Digiroad data, the frequency of incorrect values in the address numbers data object is 0.001%. The data object was compared to the NLS Topographic Database (Reference data = Update message from TD) (timestamp 13 June 2011). Total amount of reference data is 2 643 909 elements.

Direction of traffic flow:
In Digiroad data, the frequency of incorrect values in the direction of traffic flow data object is 0.009%. The data object was compared to the NLS Topographic Database (Reference data = Update message from TD) (timestamp 13 June 2011). The frequency of errors was increased by clear errors detected in the reference material and corrected by the operator (e.g. discontinuities or incorrect direction in the middle of a road element). Total amount of reference data is 2 643 909 elements.

Traffic elements:
The total number of road or street name, address numbers and direction of traffic flow data objects in the Digiroad data was compared with the corresponding number of elements in the NLS Topographic Database (timestamp 13 June 2011). The DQL value indicates that Digiroad contains 0,011% of extra elements and there are 0,002% (41 pcs) missing elements of the data objects in question. Total amount of reference data is 2 643 909 elements.

Road address:
In Digiroad data, the frequency of incorrect values is 0.47%. Digiroad data has 1.48% missing road addresses. The large percentage of missing values is mostly due to differences in geometry between the reference data and Digiroad data within the data object in question. The data object was compared with the road address network of the Finnish Transport Agency (May 2011). Total length of reference data is 80 039 km.

Maximum total weight allowed for a vehicle:
In Digiroad data, the frequency of missing values is 0%. The data object was compared with the Road register of the Finnish Transport Agency (October 2011).

Maximum weight per axle allowed for a vehicle:
In Digiroad data, the frequency of missing values is 3.8% and extra values 0%. The data object was compared with the Road register of the Finnish Transport Agency (October 2011).

Maximum weight per tandem-axle allowed for a vehicle:
In Digiroad data, the frequency of missing values is 1.32% an extra values 0%. The data object was compared with the Road register of the Finnish Transport Agency (October 2011).

Maximum total weight allowed for an articulated vehicle:
In Digiroad data, the frequency of missing values is 3.16%. The data object was compared with the Road register of the Finnish Transport Agency (October 2011).

Public transport stops on class 1 main roads:
In Digiroad data, the frequency of missing values is 0.664% and extra values 0,986%. The data object was compared with the Road register of the Finnish Transport Agency (May 2011).