

Daily Traffic Survey (DTS)

Excel; File Formats xlsx, csv, txt

Below you will find a description of the fields in Avinor's DTS reporting format.

DTS are regarded by Avinor as the operator's confirmation of the number of passengers and the weight of cargo/mail transported on a single flight movement. DTS is Avinor's primary source for billing and statistics data. Passenger, freight and mail data from DTS reports overwrites data received from other sources, e.g. the IATA messages LDM, MVT and PTM.

Note that one data row in the DTS-file represent one flight movement. E.g. the route CPH-OSL-BGO will be represented as two rows in the report, CPH-OSL and OSL-BGO.

The file name shall indicate the reporting period (from- and to-dates, inclusive) and the reporting organization, in that order. The file name cannot be more than 30 characters, including file suffix. The file name may not contain spaces.

Valid file name examples:

- 1-8JAN12_NAX.csv
- 1-8JAN12_NAX.xlsx
- 1-8JAN12_NAX.txt (See Appendix 2)

Whenever possible, use csv-format files rather than xls/xlsx-format files. In excel, convert the xls(x)-format file to semi-colon¹ delimited csv-format by saving as "CSV (Comma delimited) (*.csv)"



Send the DTS-files as attachments to an e-mail to Avinor at DTS@avinor.no.

(Refer to Appendices 1 and 2 for a description of DTS-files in fixed-field txt-format files.)

DTS reporting service

The 1st of January 2021 Avinor established the **Avinor Daily Traffic Survey Service** (<https://xwiki.avinor.no/x/tol0B>) as an alternative to the traditional reporting of DST data via e-mails. Contact dts@avinor.no.

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¹ File formats referred to in excel as "comma delimited" actually use semicolon in locales where comma is used as decimal separator. DTS-files in csv-format must use semicolon.

First Row / File Header

Field 1 / Excel column A – Row type

Mandatory. One numeric character.

Always use '1', which indicates that this is a header row.

Field 2 / Excel column B – Reporters ICAO code

Mandatory. 3 characters.

If the reporter organization do not have an ICAO code, Avinor will provide the code.

Field 3 / Excel column C – Report date

Mandatory. YYYYMMDD

Field 4 / Excel column D - ICAO airline code used in flight-id (Y/N)

Mandatory. 1 character.

If ICAO airline designator used is in FlightId field, set 'Y'.

If IATA airline designator is in FlightId field, set 'N'.

Field 5 / Excel column E - ICAO airport code used (Y/N)

Mandatory. 1 character.

If ICAO airport code is used, set 'Y'.

If IATA airport code is used, set 'N'.

Field 6 / Excel column F - ICAO airline codes for all airlines in the report

Mandatory. Maximum 126 characters.

ICAO codes for all airlines in the report, including reporting organization. Airlines are separated by a space (ASCII 32 / Hex 20).

Flights (Aircraft Movements)

Field 1 / Excel column A – Row type

Mandatory. 1 numeric character.

Always '5'. '5' indicates that the row describes an aircraft movement.

Field 2 / Excel column B –Flight-id

Mandatory. Maximum 7 characters.

The use of the IATA or ICAO airline designator in the flight ID is determined in the report header field 4. IATA or ICAO airline designator in flight ID cannot be mixed in the same report.

Field 3 / Excel column C - Departure date UTC

Mandatory. Format YYYYMMDD

UTC departure date.

Field 4 Excel column D – Departure airport

Mandatory. Maximum 4 characters.

ICAO or IATA airport code. The code used is determined by what is specified in field 5 in the header row. ICAO and IATA airport codes may not be mixed in the same report.

Field 5 / 4 Excel column E - STD UTC

Mandatory. Format HHMM.

UTC Scheduled Time of Departure.

Field 6 / Excel column F - ATD UTC

Mandatory. Format HHMM.

UTC Actual Time of Departure or Off-block time.

Note that ATD values are only used to match the data row with information from other sources. The ATD values are not used for punctuality statistics.

Field 7 / Excel column G – Delay code

Not mandatory. Maximum 2 characters.

Departure delay code.

Field 8 / Excel column H – Arrival date UTC

Mandatory. Format YYYYMMDD.

UTC arrival date at destination.

Field 9 / Excel column I – Destination

Mandatory. Maximum 4 characters.

ICAO or IATA airport code. The code used is determined by what is specified in field 5 in the header row. ICAO and IATA airport codes may not be mixed in the same report.

Field 10 / Excel column J - STA UTC

Mandatory. Format TTMM.

UTC Scheduled Time of Arrival.

Field 11 / Excel column K - ATA UTC

Mandatory. Format TTMM.

UTC Actual Time of Arrival.

Note! The ATA values in DTS-files are not stored by Avinor. The values are used for matching the movements with data from other sources.

Field 12 / Excel column L – A/C Registration

Mandatory. Maximum 10 alphanumeric characters, upper case.
Registration of aircraft. UPPER CASE, no hyphen or space.

Field 13 / Excel column M – Service type, as defined by Avinor

Mandatory. Numeric, maximum 2.

Civil flights	
Service type	Description
1	Scheduled commercial passenger flights
2	Commercial passenger charter flights
3	Freight/cargo flights
4	Helicopter traffic to the continental shelf
5	Other commercial helicopter flights
6	Other commercial flights
11	Search and rescue
12	Ambulance flight
13	Civil flight school
14	Positioning flight
15	Technical return
16	Navaid control flight
17	General aviation
Military flights	
Service type	Description
21	Military flight
22	Ambulance flight performed by military aircraft
23	Military flight school
24	Military positioning flight
25	Military test flight
26	Military navaid control flight
27	Search and rescue performed by military aircraft
28	Military aircraft participating in exercise
29	Military training flight
30	Military operational flight

Field 14 / Excel column N – Total persons on board / “Souls on board”

Mandatory. Numeric, maximum 3.

Total number of persons on board during the flight. Equals the sum of the fields 15, 16, 17, 18, 19, 20 and 21.

Field 15 / Excel column O - Active crew

Mandatory. Numeric, maximum 2.

Number of working crew on the flight. Cockpit + cabin.

Field 16 / Excel column P - Passive crew

Mandatory. Numeric, maximum 2.

Passive crew in uniform on board, who are in transport for duty on other flights.

Field 17 / Excel column Q – Duty travel

Mandatory. Numeric, maximum 2.

Other employees in the airline, traveling on duty.

Field 18 / Excel column R - Infants

Mandatory. Numeric, maximum 2.

Number of infants (0-2 years).

Field 19 / Excel column S - Number of passengers (> 2 yrs)

Mandatory. Numeric, maximum 3.

Number of passengers (> 2 years), boarded at the departure station. Not including passengers categorized as passive crew, duty travel, transfer or transit passengers.

Field 20 / Excel column T – Transfer passengers

Mandatory. Numeric, maximum 3.

Number of transfer passengers, with onward boarding pass, boarded the flight at the departure station.

Field 21 / Excel column U – Transit passengers

Mandatory. Numeric, maximum 3.

Passengers stopping temporarily at the departure station on same flight number (and same aircraft registration).

Field 22 / Excel column V - Passengers disembarked at destination

Mandatory. Numeric, maximum 3.

Number of passengers, of ALL categories, disembarking the aircraft at the arrival station. Including passive crew (Field 16), duty travel (Field 17) and infants (Field 18).

Field 23 / Excel column W – Freight loaded

Mandatory. Numeric, maximum 6.

Freight (Kg) loaded at the departure airport.

Field 24 / Excel column X – Freight unloaded at arrival

Mandatory. Numeric, maximum 6.

Freight (Kg) unloaded at the destination airport.

Field 25 / Excel column Y – Post loaded

Mandatory. Numeric, maximum 6.

Post (Kg) loaded at the departure airport.

Field 26 / Excel column Z – Post unloaded at arrival

Mandatory. Numeric, maximum 6.

Post (Kg) unloaded at the destination airport.

Field 27 / Excel column AA - International or Domestic

Mandatory. 1 character.

Movements to and from Norway are marked "I". Movements between Norwegian airports are marked "D".

Field 28 / Excel column AB - Domestic leg of international flight

Mandatory. 1 character.

Mandatory. Flights between two Norwegian airports that are part of an International flight are marked with "L". All others shall have the value "N".

Field 29 / Excel column AC - Passengers to international destination

Mandatory. Numeric, maximum 3.

Number passengers to an international destination, first time boarded on a domestic leg of an international flight.

Field 30 / Excel column AD – Comments or notes

Not mandatory. Maximum 13 alphanumeric characters.

Field 31 / Excel column AE - Unique ID

Not mandatory. Maximum 13 alphanumeric characters.

Unique identifier for the aircraft movement in question. If the supplier of the file in their system has a unique identifier for each flight movement, this is filled in here.

Last Row / File Footer

Field 1 / Excel column A – Row type

Mandatory. One numeric character.

Always use '9' which indicates that this is the footer row.

Field 2 / Excel column B – Reporters ICAO code

Mandatory. 3 characters.

If the reporter organization do not have an ICAO code, Avinor will provide the code.

Field 3 / Excel column C – Report date

Mandatory. YYYYMMDD

Same value as in the header row

Field 3 / Excel column D – Number of records

Mandatory. Numeric, maximum 6.

Number of rows in the DTS report, including header and footer.

Example file '01-08feb12WLLPKP.csv' displayed in MS Excel
(a corresponding '01-08feb12WLLPKP.xlsx' or .xls would display the same contents)

Example file converted to '01-08feb12WLLPKP.csv' displayed in Notepad

Note! Data in the examples above are not actual flight movements.

Appendix 1 DTS-files in fixed-field txt-format files

DTS-files may also be in a fixed-field text-format, file-type (suffix) “.txt”.

The same rules apply for valid file names, except that the suffix is “.txt”.

Valid file name examples:

- 1-8JAN12_NAX.txt
- 4-10NOV19_WIF.txt

DTS fields explained

Ref Appendix 2 for the actual record layout; column positions / lengths of the fields / values as explained in this appendix.

DTS fields explained

Below is a brief explanation of each of the fields in in the DTS body.

One record shall correspond to one flight leg. A flight ID with two legs will have two records in the DTS-file.

Field 1 - Record type

Mandatory.

This is a constant to that indicates that the record is an air transport movement. All records in the report body shall have the value 5.

The header line shall have the value 1 and the footer line 9.

Field 2 - Call Sign

Mandatory.

Call sign is the combination of the ICAO or IATA company code and flight number. Use ICAO (3 letters) or IATA (2 letters) code as stated in the report header line (Header field 4). The file cannot have a mix of the two.

Field 3 - Departure date UTC

Mandatory. Date of departure in UTC. Format YYYYMMDD.

Field 4 - Airport of departure

Mandatory.

IATA or ICAO code for the airport of departure. Use IATA or ICAO as stated in the report header line (Header field 5). The file cannot have a mix of the two.

Field 5 - STD UTC

Mandatory. Scheduled time of departure in UTC. Format HHMM.

Field 6 - ATD UTC

Mandatory. Actual Time of Departure / Off-Block Time in UTC. Format HHMM.

Field 7 - Delay code

Not mandatory. Delay code.

Field 8 - Arrival date UTC

Mandatory. Date of arrival in UTC. Format YYYYMMDD.

Field 9 - Destination airport

Mandatory.

IATA or ICAO code for destination airport. Whether to use IATA or ICAO is governed by what has been stated in the header (header field 5). The file cannot have a mix of both ICAO and IATA codes for airports.

Field 10 - STA UTC

Mandatory. Scheduled Time of Arrival in UTC. Format HHMM.

Field 11 - ATA UTC

Mandatory. Actual time of landing in UTC. Format HHMM.

Box 12 - A/C registration

Mandatory. Aircraft registration in numbers and capital letters, without any punctuation, space, dash or hyphen.

Field 13 – Service type

Mandatory.

Service type defined by Avinor.

Service type	Description
01	Scheduled commercial passenger flights
02	Unscheduled commercial passenger flights, e.g. charter
03	Freight
04	Helicopter traffic to the continental shelf
05	Other commercial helicopter flights
06	Other commercial flights
11	Search and rescue
12	Ambulance flight
13	Civil flight school
14	Positioning flight
15	Technical return
16	Control of navaid flight
17	General aviation
21	Military flight - General code
22	Ambulance flight performed by military aircraft
23	Military flight school
24	Military positioning flight
25	Military test flight
26	Military control flight
27	Search and rescue performed by military aircraft
28	Military maneuvers
29	Military training flight
30	Military operational flight

Field 14 - Total Persons on Board

Mandatory. All persons onboard the aircraft. The value should correspond to the sum of fields 15, 16, 17, 18, 19, 20 and 21.

Field 15 - Active crew

Mandatory. Crew working on the flight in question.

Field 16 - Passive crew

Mandatory. Crew in transport to or from work on other flights.

Field 17 - Duty travel

Mandatory. The company's own employees traveling on duty.

Field 18 - Infants

Mandatory. Children under 2 years of age.

Field 19 - Passengers boarded

Mandatory. Passengers boarded the aircraft at the departure airport, excluding infants.

Field 20 - Transfer passengers boarded

Mandatory. Transfer passengers boarded the aircraft.

ACI definition: Passengers arriving and departing on a different aircraft, or on the same aircraft bearing different flight numbers.

Field 21 – Transit passengers

Mandatory. Passengers that are in transit on the flight at departure station.

ACI definition: Passengers stopping temporarily at the designated airport and departing on an aircraft with the same flight number (and same aircraft registration).

Field 22 - Passengers disembarking at destination

Mandatory. All passengers that are disembarking the aircraft at the destination airport.

Including passive crew (Field 16), duty travel (Field 17) and infants (Field 18).

Field 23 - Freight loaded

Mandatory. Number of kilograms cargo loaded the aircraft at departure airport.

Field 24 - Freight unloaded

Mandatory. Number of kilograms cargo unloaded the aircraft at destination airport.

Field 25 - Mail loaded

Mandatory. Number of kilograms mail loaded on the aircraft at departure airport.

Field 26 - Mail unloaded

Mandatory. Number of kilograms mail unloaded the aircraft at the destination airport.

Field 27 - International or Domestic

Mandatory. International or Domestic movement. Movements to and from Norway are marked "I". Movements between Norwegian airports are marked "D".

Field 28 - Domestic leg of international flight

Mandatory. Flights between two Norwegian airports that are part of an International flight are marked with "L". All others shall have the value "N".

Field 29 - Passengers to international destination

Mandatory. Number passengers to an international destination, first time boarded on a domestic leg of an international flight.

Field 30 - Comments or notes

Not mandatory.

Field 31 - Unique ID

Not mandatory.

Unique identifier for the aircraft movement in question. If the supplier of the file in their system has a unique identifier for each flight, this is filled in here.

Appendix 2 Record Layout (Fixed Column Width) for DTS Data

Record layout (fixed column width) for DTS data transferred from airline to Avinor							
Updated 14.12.2011							
A = Alphanumeric value, N = Numeric value Alphanumeric fields are left-aligned and padded with ' ' (spaces), Numeric fields are right-aligned and padded with '0' (zeroes) RECORD SEPARATOR is linefeed							
HEADER:							
Field	Mandatory						
No.	Pos.	From	To	Type	Format	value	TEXT
1	1	1	1	N	N	Y	Record type = 1
2	3	2	4	A	AAA	Y	ICAO designator of Airline Company
3	8	5	12	N	AAAAMMDD	Y	Production date of file
4	1	13	13	A	A	Y	ICAO designator in callsign: "J" or "Y" - IATA designator: "N"
5	1	14	14	A	A	Y	ICAO location indicator: "J" or "Y" - IATA designator: "N".
6	126	15	140	A	AAA aaa ...	Y	ICAO company designator(s) in the file - including the "producing" company; designators separated by spaces (ASCII 32/hex 20); "ABC DEF GHI"
	140						

FLIGHTS:							
Nr.	Pos.	From	To	Type	Format	Mandatory value	TEKST
1	1	1	1	N	N	Y	Recordtype = 5
2	7	2	8	A	AAaNNNn	Y	Callesign - eg. SAS123 (ICAO) or SK123 (IATA)
3	8	9	16	N	YYYYMMDD	Y	Date of departure - UTC (UTC = GMT)
4	4	17	20	A	AAAa	Y	Departure aerodrome - ICAO or IATA designator.
5	4	21	24	N	TTMM	Y	ETD (Estimated/Scheduled Time of Departure) - UTC
6	4	25	28	N	TTMM	Y	ATD (Actual Time of Departure/Off-block Time) - UTC
7	2	29	30	A	Aa	N	Delay code
8	8	31	38	N	YYYYMMDD	Y	Date of arrival - UTC
9	4	39	42	A	AAAa	Y	Destination aerodrome - ICAO or IATA designator
10	4	43	46	N	TTMM	Y	ETA (Estimated/Scheduled Time of Arrival) - UTC
11	4	47	50	N	TTMM	Y	ATA (Actual Time of Arrival/On-block Time) - UTC
12	10	51	60	A	AAAAAaaaaa	Y	Registration mark - without any space, dash or similiar (LNABC, not LN-ABC)
13	2	61	62	N	00	Y	Flight code (as defined by Avinor). From 12.12.1999 codes used : 1-6, 11-17, 21
14	3	63	65	N	000	Y	"Total Persons On Board" - All persons on board including crew
15	2	66	67	N	00	Y	Crew, active
16	2	68	69	N	00	Y	Crew, passive
17	2	70	71	N	00	Y	Official trip made by airlines employers on duty
18	2	72	73	N	00	Y	Infants (under 2 years)
19	3	74	76	N	000	Y	PAX departing from aerodrome
20	3	77	79	N	000	Y	PAX departing - in transfer from other routes
21	3	80	82	N	000	Y	PAX in transit
22	3	83	85	N	000	Y	PAX arrived at destination aerodrome **
23	6	86	91	N	000000	Y	Cargo loaded - in Kilograms
24	6	92	97	N	000000	Y	Cargo off-loaded - in Kilograms
25	5	98	102	N	00000	Y	Mail loaded - in Kilograms
26	5	103	107	N	00000	Y	Mail off-loaded - in Kilograms
27	1	108	108	A	A	Y	International ("I") or Domestic ("D") flight
28	1	109	109	A	A	Y	Domestic leg of international flight ("L") or "N"
29	3	110	112	N	000	Y	Passenger departing on domestic flight with transferticket to an international flight
30	13	113	125	A	Aaa aaa ...	N	Airlines transferpassengers are transferring to. (ref pos. 29)
31	15	126	140	A	Aa...	N	Customers reference-id for return messages to Avinor
140		* Equals the sumf fields: 15, 16, 17, 18, 19, 20 and 21.					
		** Equals the sum of 16, 17, 18, 19, 20 and 21 leaving the aircraft at landing					

FOOTER:							
Field nr.	Pos.	From	To	Type	Format	Mandatory Value	TEXT
1	1	1	1	N	N	Y	Recordtype = 9
2	3	2	4	A	NNN	Y	ICAO designator for company (same as in header)
3	8	5	12	N	YYYYMMDD	Y	Production date of file (same as in header)
4	6	13	18	N	000000	Y	No. of records in file - including header and footer
5	122	19	140	A		N	Filler
	140						