



## CANSO Members creating capacity in Europe.

CANSO is the global voice of air traffic management and together CANSO Members work to address key industry issues and champion innovation. With air traffic in Europe at an all time high – with traffic growth in 2018 outstripping estimates for most air navigation service providers (ANSP) – CANSO ANSP Members in the region are implementing a range of measures to accommodate rising demand and create much-needed capacity, both now and in the future.

### CANSO Member: DFS

DFS is a State-owned company under private law and has 5,5 00 employees. Founded in 1993, DFS Deutsche Flugsicherung GmbH is the successor to the Federal Administration of Air Navigation Services, a government authority which had existed for 39 years.



### Air traffic growth in Germany



Air traffic growth in terms of en-route service units **increased 18.6 %** during 2014-2019 (RP2) which is **14.3 % higher** than the RP performance plan forecast



Forecast traffic growth was **5.2 % over** the initial estimates for RP2



Actual traffic growth in terms of en-route IFR movements **increased 12.8 %** during 2014-2019 (RP2), which is **7.7 % higher** than the RP performance plan forecast



**3.35 million** flights in 2018  
**1.61 million** IFR flights in first half of 2019

\* IFR movement is a number of IFR operations, while Service Unit is a combined measure of length of a flight and weight of an aircraft. The same number of movements of heavy airplanes gives higher number of Service Units than the same number of movements of lighter planes.

### How DFS is improving capacity

#### Measures to improve domestic capacity – now to two years



##### System improvements

- ▶ Deployment of collaborative advanced planning (CAP) tools
- ▶ Additional optimisations of the ATM system iCAS (detection of unanticipated traffic)
- ▶ Deployment of ATFM tool Air Magic in the ACCs of Bremen and Langen
- ▶ Intensified use of data link at UAC Karlsruhe



### Airspace changes

- ▶ Network-wide airspace re-design with NM in Airspace Design Coordination Group
- ▶ Optimised sector configuration, e.g. lateral split of Tegernsee sector at ACC Munich



### Ops procedural changes

- ▶ Significant relief for the congested airspace of UAC Karlsruhe by transferring traffic to the lower airspace of the ACCs in Langen, Munich and Bremen (application of the DFS contribution to the eNM/S19 initiative)
- ▶ Optimisation of capacity utilisation by reducing flight plan fluctuations as a result of the “fly as filed” initiative. This is supported by new ATM system functionalities as well as ATCO and airline briefings.
- ▶ DFS capacity initiative (including around 90 further short- and medium-term measures)



### People related improvements (training/rostering)

- ▶ Maximum possible deployment of available ATCOs in operations (including relief of ATCOs from non-operational tasks, such as projects, international working groups)
- ▶ Successful conclusion of a collective agreement on voluntary additional shifts
- ▶ Enhanced flexibility through ATCO sector mobility
- ▶ Recruitment and familiarisation of existing industry professionals



### Cross-border initiatives

- ▶ Coordination of the Alpine Region in case of thunderstorms (DFS, Austro Control, ENAV)
- ▶ Participation in the eNM/S19 initiative coordinated by the EU Network Manager

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## Measures to improve domestic capacity – three to five years

- ▶ Recruitment of new ab-initio trainees until the maximum capacity level at the DFS Academy in Langen is reached (122 trainees in 2019, 146 trainees in 2020)
- ▶ Employment of ready entries
- ▶ Use of new ATM systems in the lower airspace of the ACCs in Munich, Bremen and Langen (e.g. step-by-step implementation of iCAS at all DFS ACCs)
- ▶ Increase in flexibility and productivity through flight-centric operations (S-ATM)
- ▶ Optimisation of airspace structure for Frankfurt Approach