

SAFETY & SECURITY



APFel aims to develop a system which supports human operators in analyzing video data in order to protect critical infrastructures, especially airports.

The main objectives of the overall project address the following questions:

- The detection of the actual location of a person by using live-video streams: **Where is the person right now?**
- The detection of the covered way/path on the basis of recorded video data sets (backward analysis): **Where did the person come from?**
- The prediction of the movement of persons and the most likely probabilistic location (forward analysis): **Where could the person go to resp. has been gone to?**

The research work of the consortium includes:

- Detection, tracking and recognition of people (camera based and across multiple cameras)
- Location prediction
- Setup of an operational demonstrator to prove the functionality
- Data privacy and security
- Acceptance analysis

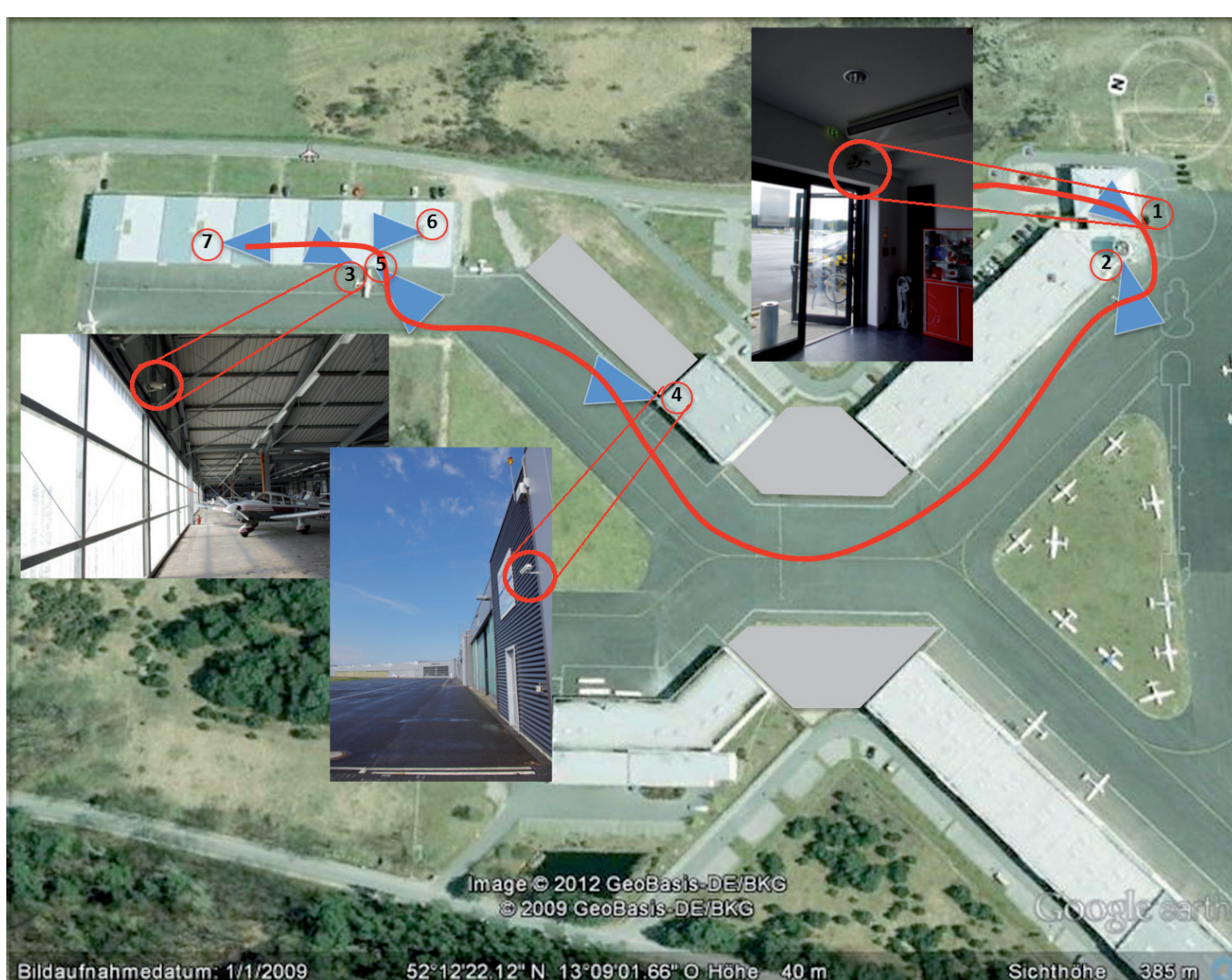
Within the consortium the HRW is specialized in sensor near image processing like illumination correction, GPU-based detection methods (parallelization), data fusion, people tracking and feature extraction, tracking of single persons within larger groups of people.

The General Aviation Airport Schönhagen and Erfurt-Weimar Airport were chosen to test and evaluate the developed system. Here, the research work could be applied to realistic airport infrastructures and the prototype system could be tested under practical conditions.

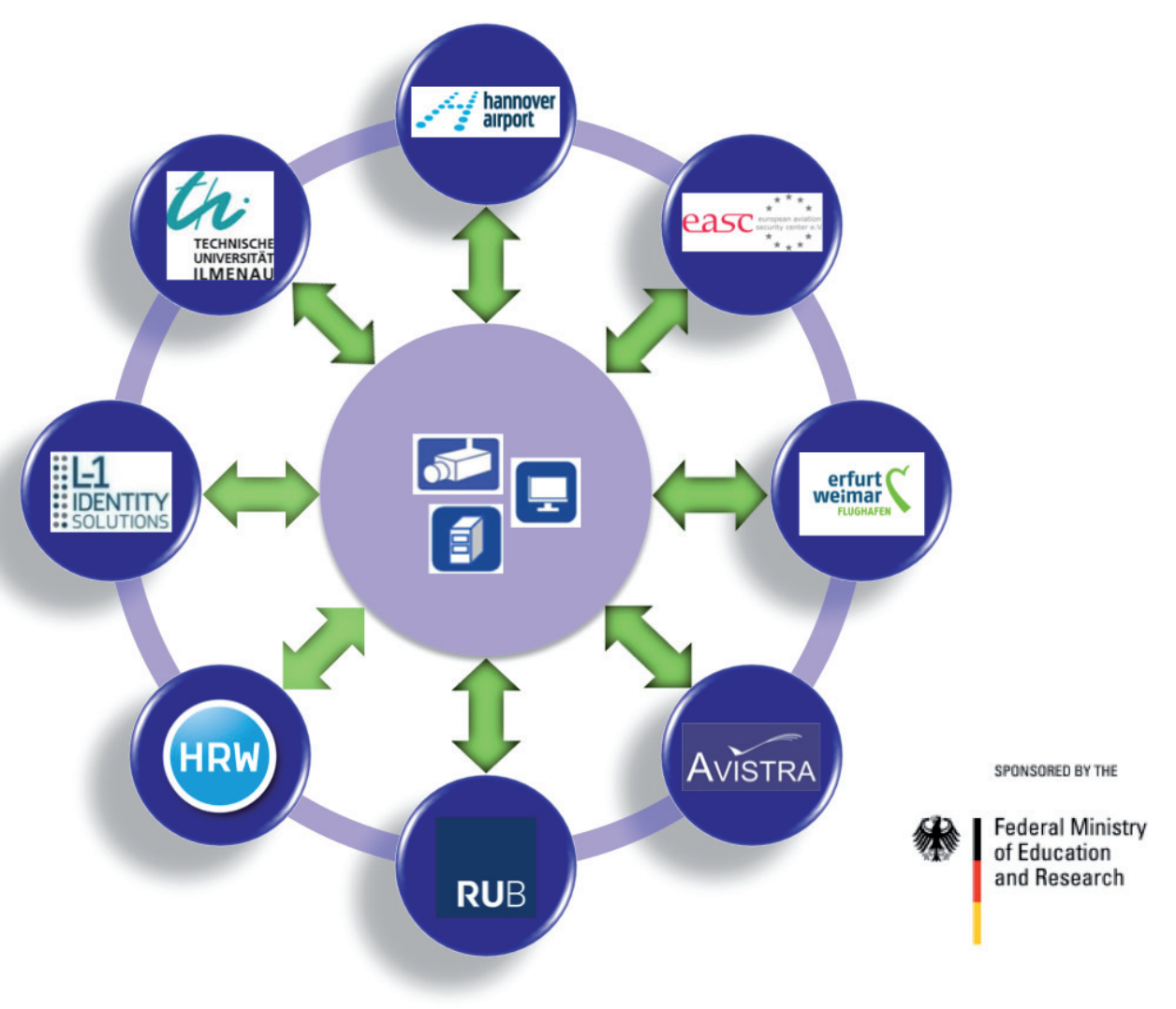
Start date: January 2010

End date: March 2014

Total costs: 2.579.251 (HRW 604.556)



Camera positions at the Schönhagen airfield (@easc e.V. and Google Earth)



APFel consortium

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