Monitoring controllers’ competence is an essential part of safety management. According to Regulation (EU) 1035/2011, a Safety Management System shall ensure that in addition to being properly licensed and satisfying applicable medical fitness requirements, all personnel are adequately trained and competent for the job they are required to do.

FerroNATS has defined control mechanisms to ensure that all operational controllers remain competent to carry out their duties. The methodology is internally known as the Competency Scheme.

**Competency Scheme in FerroNATS**

FerroNATS Competency Scheme has been adapted to ensure compliance with Regulation (EU) 2015/340. The Scheme includes both the training and assessment of controllers’ practical skills.

**Training**

FerroNATS Competency Scheme comprises Refresher and Conversion training. The former refers to periodical training on standard practices and procedures, abnormal and emergency situations, and human factors. The latter is designed to provide knowledge and skills appropriate to a change in the operational environment when the safety assessment of the change concludes the need for such training.

**Assessment of practical skills**

FerroNATS Competency Scheme includes diverse methodologies to periodically assess controllers’ practical skills, which widens the scope of the assessment required by Regulation (EU) 2015/340. FerroNATS Competency Scheme includes 3 methodologies to assess controllers’ competence:

- Periodical on-the-job assessment, where an assessor will monitor a controller’s practical abilities while working on the operational position with real traffic
- Simulator assessment, where an assessor will check the controller’s skills during a dedicated simulation session (normally to cover a specific aspect of training or familiarization).
- R/T sampling assessment, where the assessor will check a controller’s use of radiotelephony, i.e. phraseology and transmission technique.

FerroNATS Competency Scheme requires a minimum of 3 on-the-job practical assessments and 3 R/T sampling assessments per year for each controller.
How R/T Sampling works

The inclusion of R/T sampling assessments in the FerroNATS Competency Scheme is based on EUROCONTROL's Normal Operations Safety Survey (NOSS) concept. The rationale behind using this tool to assess controllers' competence is to be able to gather real-time information from daily operations in situations where the controller is unaware that a check is being done. This way, the conclusion from the assessment provides an indication of operational performance in a realistic environment, allowing the detection of improvement areas at both individual and system level.

In an R/T sampling assessment, an assessor selects a minimum of 30 minutes recording of the R/T for the assessed controller. The time of day, traffic levels and complexity of the situation are taken into account by the assessor to select the recording period. The period reflects as realistically as possible the normal operation in the unit, so periods with unusual situations or safety events are avoided. The sessions to be analysed are not communicated to the assessed controller to ensure that the assessment reflects the reality of operations as much as possible. The assessor evaluates the controller's use of correct phraseology and transmission technique using a specific evaluation form. The evaluation focuses on the identification of individual improvement objectives.

After conducting the evaluation, the assessor reviews the recorded session with the assessed controller. Specific parts of the R/T are replayed, encouraging the controller to be self-critical. Special focus is given to the improvement objectives identified by the assessor, which are subsequently reviewed during further R/T assessments of the controller.

R/T sampling as a proactive tool to identify risk

As explained before, the use of R/T sampling assessments allows an identification of individual improvement areas that are checked on subsequent assessments, allowing the unit chief of safety to have a record of the controller competence evolution over time. In this sense, R/T sampling is a powerful tool in competency assurance.

In this way, the use of R/T sampling operates as a proactive source for risk identification, that provides information on the existence of small holes in the Reason's 'Swiss Cheese' before they develop into actual failures of the system, i.e. safety events.

However, the tool offers further advantages. Since the assessment is conducted by using the same evaluation form in all the organisation, and taking into account that specific objectives have been identified in the form and are scored according to a set standard, the aggregation of information from R/T sampling assessments allows the identification of systemic issues. Unit level examiners are responsible for aggregating data and checking for common issues/trends.

This information is shared with Unit Managers who are accountable for operational performance and who apply corrective actions when necessary.