EMIT regulations

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Change History

Version	Status	Date	Handled by	Comments
	Draft	19.07.2009	Juha Heikkilä	Initial Draft
	Draft	20.07.2009	Kari Mamia	Fixed some terms – some other minor changes
1.0	Final	28.07.2009	Juha Heikkilä	Included comments from Leena Sihvo
1.1	Draft	04.08.2010	Juha Heikkilä	Small updates to reflect the changes in 2010 regulations
2.0	Final	10.08.2010	Juha Heikkilä	Final version after feedback period.
3.0	Final	2011-09-17	Kari Mamia	Chapter 3 rewritten, markings changed to chapter 4 and added chapter 5 to match the 2011 regulations. Some modifications in chapter 2

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1. INTRODUCTION

This document is a collection of Finnish regulations for electronic time controls. Regulations and practices that are relevant for a participant are listed here. Descriptions are based on 2011 Finnish national auto navigation regulations. Emit in this document means "Electronic Punching and Timing system for orienteering".

2. TERMINOLOGY

Emit-card Emit-kortti	A small plastic card that is given to a competitor at start. When the competitor punches emit-card at time control, the code of the checkpoint is registered in the emit-card with the time from zeroing the card.
Emit-zero control unit Emit-nollaleimasin	The zero control unit is located at the competition centre. Zero control unit is clearing the memory of the EMIT-card and starting it's internal clock. Zero procedure clears the card memory and starts its internal clock. The "zero" control unit is giving signal with a led showing the status of the card. No light means the battery of the EMIT-card is dead and the card is useless. Blinking led with a pattern two blinks – break – two blinks means battery is almost dead and the card should not be used. Regular blinking is a sign of good card and the clock of the card starts when the emit-card is taken away from the "zero" control unit.
Emit-punching unit Emit-leimasin	Emit-punching unit is located at time control. Competitors punch their Emit-cards into Emit-punching unit. Working distance of the Emit punching unit to emit-card

	about 10 cm. It means that the time can unintentionally be registered when the emit-card is taken too close above to the punching unit. However, the time is registered for sure only when the emit-card reaches the bottom of the punching unit. Unlike at the zero-control unit, the time is registered when the emit-card first receives the signal from the control unit.
Time control AT-asema	"AT", "JAT", "tidskontrol"
Punching Leimaus	Competitor attaches Emit-card to Emit-control unit for registering the time, "stämpling"
Control card Kilpailukortti	A card with 13 rows for marking route and time controls, "tävlingskort". Cards are received at the registration.
Driving instructions Ajomääräys	Multiple pages of A4-size instructions received at the registration. "Körorder"
Emit-ULA	New starting time that is self-chosen and punched at punching unit. Used only when instructed in driving instructions.

3. REGULATIONS

This chapter gives **application notes** for electronic time controls used in auto navigation competitions. Electronic time control system is called emit due to the fact that only Emit EPT system is used in Finnish auto navigation races. These instructions must be strictly followed (when applicable) also when other electronic time control system (e.g. SportIdent) is used. These instructions give additional and more detailed information for organiser and competitor than official auto navigation regulations by AKK.

According to § 10.8 the emit card (electronic time control device) is given to the competitor with the other material that is delivered at start. Competitor is obliged to perform all electronic punchings by oneself.

Result calculation is using starting times according to §30.1 either real punching times (**style 1**) or equal minutes calculated from the punching times (**style 2**); organiser is obliged to specify at latest at the official bulletin board before the competition starts which style is used in the competition.

Organiser is obliged to keep **start protocol** that contents at least the number of the competitor, number of the electronic card and real clearing time if deviated one second or more from the informed zeroing time (normally 120 seconds before starting time).

Electronic time controls (emit-AT, emit-JAT, FINISH) are marked on terrain according to § 40.4. Punching unit is **always** to be located on the left side of the route, taking into account issues of safety, space for queuing (at least 2-3 cars) and need of passing other competitors when arriving to the control. Organiser is also obliged to take into account that the punching can be **easily** performed from the car by the driver. In case the competitor is too early and stops to wait for ideal time before the control, it must be done in such a way that other competitors are able to pass and reach the control. In electronic time control the competitor **must mark** the **punching time** to the next available line in the control card. In manned control only personnel make markings to the control card.

In public time controls new start time is always obtained according to §30.1. If the place for arriving and starting is not at the same spot, starting place is marked according to §40.4 with JAT-plate on the left side of the track. In this case arriving control punching unit is at the shift point and starting place is somewhere on the way to the next shift point.

There are four alternatives for giving new starting time and it must be explained in the driving instructions of the JAT control in question.

A. Manned JAT-control gives both times for arriving the control and new starting. Emit card is not punched.

B. Manned JAT-control that gives and marks new starting time is located ca. 30…100 m from shift point and the electronic arriving time control unit. Punching emit-card when starting is to be done according to the driving instructions. It is mandatory to drive directly to the manned control or to the end of the queue after punching at the arriving of the control.

C. New starting time is self-chosen at the unmanned control (emit-ULA) that is located ca. 30…100 m from the electronic arriving time control unit and marked in terrain with JAT-plate. It is mandatory to drive directly to the starting control unit or to the end of the queue after punching at the arriving of the control. If there is a queue, new starting time is one minute after the last starter. If there is no queue, new starting time must be within four minutes from the time of arriving. Competitor is obliged to write the starting time to the control card and punch emit card at starting time.

D. Unmanned JAT control from which the starting time is same as arriving time. Only one time is marked on the control card, i.e. new starting time is not to be marked.

Starting order must be same as arriving order.

JAT control may be defined as free arriving by stating it on the driving instructions. In case JAT is delivering competition material, it must be explained in driving instructions what is delivered and how, also how time control punching is carried out.

JRT controls may not be used after unmanned new starting time.

In case electronic time control is used, maximum of two time controls may be used per stage and control card may not be pre-closed by stages.

Break is best organised by adding the length of the break in ideal time between shift points and ending the break with emit-AT or JAT control that is located as close as possible to the place of the break.

In the finish the competitor gives the control cards and emit-card to the organiser as described in the driving instructions. Organiser must take care that no zeroing devices exist on the route to the results calculation.

In case the emit card is found faulty, clearly independent to the competitor, and no times can be read from the card, the results may be calculated using the self-marked times from the control cards after the jury has heard the competitor. Decision of the jury may relay on the control slip which states that the competitor has punched on all time controls. It is recommended that the control slip is used in championship and cup competitions.

Penalty points at time controls according to §10.14:

- missing time mark in control card: 600 pp
  (additionally to the time penalty form punching time)

- missing AT-time in emit card: 1800 pp, no penalty from time

- missing JAT-time in emit card: interruption, even when there is a time marking on the control card

- maximum penalty points (AT 1800, JAT 3600)

- extra AT or JRT marking on control card: 600 pp.

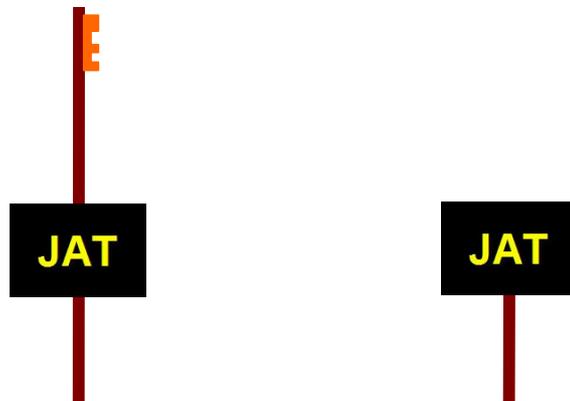- lost emit card: disqualification

4. MARKING

Emit time controls are marked in terrain as below. Emit-punching unit is on the left side so it is the drivers duty to do the punching.
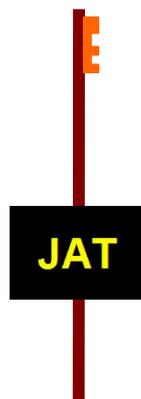
EMIT-AT: AT-plate is on both sides of the track, punching unit on the left.
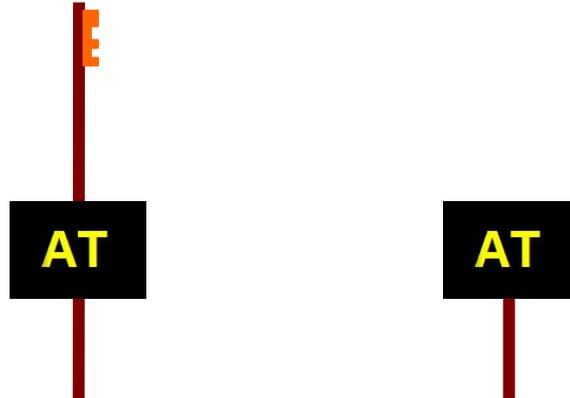
EMIT-JAT JAT-plate is on both sides of the track, punching unit on the left

EMIT-ULA JAT-plate and punching unit are on the left side of the track.

5. INSTRUCTIONS FOR BULLETIN BOARD AND DRIVING ORDER

This chapter gives the examples of how the electronic time control should be clarified at official bulletin board before the competition starts.

In this competition the following methods and styles are used at electronic time controls

Only one of the following two may be used:

Results are calculated using starting times according to style 1: real punching times

Results are calculated using starting times according to style 2: equal minutes calculated from punching times

Following alternatives are used to give new starting times:

Alt. A

Manned JAT-control gives both times for arriving the control and new starting. Emit card is not punched.

Example of the wording in driving instructions:

New starting time is the time given by the personnel + XX min.

In case new material is given, additionally:

JAT gives NN new maps YY sec before the starting time.

Alt. B

Manned JAT-control that gives and marks new starting time is located ca. 30…100 m from shift point and the electronic arriving time control unit. Punching emit-card when starting is to be done according to the driving instructions. It is mandatory to drive directly to the manned control or to the end of the queue after punching at the arriving of the control.

Example of the wording in driving instructions:

New starting time is the time given by the personnel + XX min.

In case new material is given, additionally:

JAT gives XX new maps YY sec before the starting time. Emit-card is punched at the starting time.

Alt. C

New starting time is self-chosen at the unmanned control (emit-ULA) that is located ca. 30…100 m from the electronic arriving time control unit. It is mandatory to drive directly to the starting control unit or to the end of the queue after punching at the arriving of the control. If there is a queue, new starting time is one minute after the last starter. If there is no queue, new starting time must be within four minutes from the time of arriving. Competitor is obliged to write the starting time to the control card and punch emit card at starting time.

Example of the wording in driving instructions:

New starting time is self chosen, marked on the control card and emit card punched on time.

Alt D

Unmanned JAT control from which the starting time is same as arriving time. Only one time is marked on the control card, i.e. new starting time is not to be marked.

Example of the wording in driving instructions:

New starting time is the arriving time + xx min (minimum 2 minutes)