Subject: Prior-checking Opinion regarding the use of thermal imaging cameras and the auto-track functionality of pan-tilt cameras at the European Central Bank (case 2015-0938)

Dear Mr Klimowski,

On 27 October 2015, the European Data Protection Supervisor (EDPS) received from the Data Protection Officer (DPO) of the European Central Bank (ECB) a notification for prior checking under Article 27 of Regulation (EC) No 45/2001 (the Regulation) on the processing operations related to the use of thermal imaging cameras and the auto-track functionality of pan-tilt cameras in the context of the ECB Video Surveillance Policy issued 1 March 2015 ("the ECB CCTV Policy") for the ECB Main Building.

As the EDPS issued Video-Surveillance Guidelines¹ (henceforth: "Guidelines"), the EDPS will highlight only those ECB practices which do not seem to be in conformity with the principles of the Regulation and with the Guidelines issued by the EDPS in March 2010 and will restrict his legal analysis to those practices. In the light of the accountability principle guiding his work, the EDPS would nonetheless want to highlight that all relevant recommendations made in the Guidelines apply to the processing operations put in place in the frame of the video-surveillance system at the ECB.

Section 4.3 of the Guidelines outlines the situations in which the EDPS considers that a prior checking notification under Article 27 of the Regulation is required to assist the relevant institution in establishing additional data protection safeguards in cases where its activities go beyond the standard operations for which the Guidelines already provide sufficient safeguards. The situations referred to in Section 4.3 of the Guidelines include inter alia the use of high-tech or intelligent video-surveillance. As outlined in the notification and the annexed Privacy Impact Assessment, the ECB intends to use high-tech and intelligent video-surveillance as foreseen in Section 6.9 (bullet points 5 and 7) of the Guidelines. The processing operations under examination are thus subject to prior-checking in conformity with Article 27 of the Regulation.

However, as has been highlighted by the EDPS upon publication of the Guidelines\(^2\), only in exceptional cases will the prior-checking be comprehensive and cover all aspects of a video-surveillance system. In most cases, the EDPS will not comprehensively review all aspects of the institution's video-surveillance practices.

1. **Proceedings**

The procedure was notified for prior checking under Article 27 of the Regulation on 27 October 2015. The EDPS invited the ECB to reply to a number of questions on 28 October 2015, to which the ECB replied on 11 December 2015. The draft Opinion was sent to the DPO for comments on 20 January 2016. The EDPS received a reply on 29 January 2016.

2. **Use of high-tech / intelligent video-surveillance**

**Facts**

Section 2.3.2 of the [ECB CCTV Policy](http://www.edps.europa.eu/EDPSWEB/webdav/site/mySite/shared/Documents/Supervision/Guidelines/10-03-17_FAQ_videosurveillance_EN.pdf) under the heading of "Prior check of so-called high-tech and/or intelligent video-surveillance" refers to the following system technologies:

- Auto-tracking functionality for perimeter protection cameras covering the fence area and the fire lanes inside the premises;
- Use of thermal imaging cameras as alarm detectors for the detection of intruders at the landscape.

Section 3.2 of the [ECB CCTV Policy](http://www.edps.europa.eu/EDPSWEB/webdav/site/mySite/shared/Documents/Supervision/Guidelines/10-03-17_FAQ_videosurveillance_EN.pdf) under the heading of "Split of cameras by type of technology" further describes the respective use of technology.

The notification contains the following further description of the system:

- "The use of thermal imaging cameras and the auto-tracking functionality of pan-tilt cameras are tools to ensure the physical security on and access control to the ECB Main Building premises. To this end, the thermal imaging cameras will serve as alarm detectors within the perimeter of the ECB Main Building. When activated, the thermal imaging cameras will trigger an alarm in case any activity is detected. Thermal imaging cameras are installed at the corners of the building (both the former wholesale building and the High Rise) at either 40 metres or 135 metres above ground. The camera/lens combination is set very low to only perceive the presence of a person. On the images, a person will only be depicted by 20 pixels of the total of 307,200 pixels that an image consists of..."
The auto-tracking functionality of pan-tilt cameras is an add-on functionality that will be triggered by an alarm raised by the thermal imaging cameras for pan-tilt cameras covering the fence area up to the fire lanes inside the premises... When the thermal imaging cameras have triggered an alarm, the auto-tracking functionality will enable security guards to locate and follow a potential intruder approaching the building from the fence via the images displayed in the security control room. In total, 60 pan-tilt cameras installed will have the auto-tracking functionality. The zoom configuration is set on the minimum necessary to be able to follow a person."

A privacy impact assessment ("PIA") accompanying the notification identifies the privacy impact of and risks related to the use of thermal imaging cameras and the auto-tracking functionality of pan-tilt cameras as part of the ECB CCTV Policy. In addition, it explores measures to mitigate this impact and the risk management.

Legal analysis

Under Section 6.9 of the Guidelines, "the introduction of "high-tech video-surveillance tools" or "intelligent video-surveillance systems" are permissible only subject to an impact assessment. They are also subject to prior checking. The EDPS will assess, case by case, the permissibility of the technique used and may impose, as necessary, specific data protection safeguards". Tools falling under this category include, among others:

- a network of cameras installed, complete with a tracking software application that can track moving objects or people throughout the whole area;
- infra-red or near-infrared cameras, thermal imaging devices and other special use cameras that can capture images in the dark or under low-light conditions, see through walls and search under clothing (e.g. body-scanner).

In this context, the EDPS welcomes that:

- the ECB has provided a comprehensive PIA;
- has demonstrated the permissibility (necessity and proportionality) of the technique used and
- has the intention of applying specific data protection safeguards to mitigate the privacy impact of the technique used.

a) The privacy impact assessment (PIA)

The PIA provided together with the notification is comprehensive in that it identifies the privacy impact of and risks related to the use of thermal imaging cameras and the auto-tracking functionality of pan-tilt cameras as part of the ECB CCTV Policy. In addition, it explores measures to mitigate this impact and the risk management.

In this context, the EDPS welcomes in particular that

- An in-depth assessment took place, which covered the general design of video surveillance at the ECB. This included the assessment of the ECB’s vulnerability in a general risk profile, on the basis of which functional requirements for a physical security policy were established (i.e. security quality requirements). Subsequently, a physical security planner was tasked to elaborate a technical solution matching the functional requirements. In 2012, test installations were organised to confirm that the functional requirements were met. Only after the testing, the exact numbers and
locations of cameras were determined, with a view to limit the personal data captured as much as possible while still achieving the intended security purpose. In this phase also the lens configuration and viewing angle were set.

It is not clear, though, when the PIA was carried out. The PIA should have been conducted as soon as the ECB physical security requirements were stable and possible functional/technical options were explored. The outcome should have provided requirements for the choice of these options (thus including relevant public procurement).

- Potential alternatives to the use of high-tech and intelligent video-surveillance have been considered by the ECB. Based in these considerations, which are fully documented in the privacy impact assessment, the ECB considers that no other alternatives to the proposed set-up are considered to be reasonably available.

Against this background, the EDPS would like to make the following recommendations:

The PIA document does not show that the assessment is the output of an established process or procedure, which contributes to the trustworthiness of the PIA's outcome. In this case, in particular:

- The relevant provisions of the Regulation should be described and listed in the PIA not to forget anything;
- The relevant data protection risks (including IT security ones) should be exhaustively identified and sized;
- The PIA exercise should be documented in all its phases (including risk identification, risk assessment, risk treatment and relevant countermeasures). This would enable a verifiable and repeatable process. Rules for PIA review (periodic or in case of changes either in the processing operations planned or in the risk landscape or even in the applicable legal provisions) should also be integrated.

Nevertheless, because of the comprehensiveness of the information provided in the notification, of the outcome of the assessment and of the circumstances driving the ECB to apply these measures, the EDPS considers that operations may start before the recommendations above have been satisfactorily implemented, if the ECB deems it necessary.

b) **Permissibility of the technique used and data protection safeguards applied**

Next to the necessity and proportionality considerations outlined above as regards the privacy impact assessment conducted, the notification clarifies that "the use of thermal imaging cameras and the auto-tracking functionality of pan-tilt cameras at the ECB is necessary for several reasons.

- Firstly, physical security on and access control to the ECB premises need to be ensured as there is a continuous risk level at the ECB". This is illustrated with several examples and leads the ECB to conclude that "The situation of continuous risk and potential threats to the ECB premises, its staff, visitors and other persons present requires measures to ensure physical security and access control to the ECB main building".
The ECB secondly argues in the notification that "the tools of the thermal imaging cameras and auto-tracking functionality are necessary to ensure physical security and access control while complying with the planning requirements of both the ECB Governing Council and the City of Frankfurt” and gives further detailed explanations, including that "The combination of a densely planted park area with little lighting necessitates the use of thermal imaging cameras to detect possible intruders and the use of the auto-tracking functionality to enable security guards to control who enters the area and possibly follow that person".

In the light of the explanations given, the EDPS has no reason to believe that less privacy-restrictive alternative techniques could be used by the ECB to achieve the same purpose of providing physical security on and access control to the ECB premises in the light of the ECB specific risk level.

As regards the proportionality of the techniques used, the EDPS welcomes the comprehensive considerations contained in the privacy impact assessment, in particular that
- The thermal imaging cameras do not capture recognisable features but just provide images sufficient to “perceive” a person in the specific area.
- The auto-tracking functionality of pan-tilt cameras is installed to “recognise” a shape as a person, as it is necessary to enable the security guards to follow the individual around.
- The automatic activation is limited in time and event based;
- No sensitive data are collected and the data is not stored per individual person walking around but instead per camera, so it is not very easily possible to track someone over the premises by looking at the recordings.

Against this background, the EDPS does not see any more proportionate way to address the need to provide physical security on and access control to the ECB premises in the light of the ECB specific risk level. In the light of these measures, the EDPS also concludes that adequate data protection safeguards will be put in place to mitigate the privacy impact of the techniques.

4. Conclusions

The EDPS recommends that the ECB adopts specific and concrete measures to implement the above suggestions and recommendations regarding the ECB’s CCTV Policy and the notified ad hoc covert surveillance measure. The EDPS invites the ECB to attach this Opinion to its CCTV Policy and to include a reference to it in Section 2.3.2 of the ECB CCTV Policy.

As concerns the suggestions and recommendations mentioned in this note, the EDPS would like to be informed about the situation regarding the compliance with the Guidelines and receive the requested information.

To facilitate our follow-up, please provide the EDPS with all relevant documents within three months of the date of this letter which prove that all recommendations and reminders have been implemented.

The EDPS would like to remind the ECB that the processing operation at hand may in principle not commence until all recommendations have been implemented or the ECB has duly justified why they have not been implemented. However, because of the comprehensiveness of the information provided, of the outcome of the assessment and of the
circumstances driving the ECB to apply these measures, the EDPS considers that, in the case at hand, operations may start even before the recommendations have been satisfactorily implemented, if the ECB deems it necessary.

Kind regards,

Wojciech RAFAŁ WIEWIÓROWSKI

Cc: Ms Barabara EGGL, DPO European Central Bank