IQ Structures, a Czech research and production organisation, announced holograms for transparent windows in polycarbonate cards. These holograms include visual effects from both sides of the card.

Polycarbonate is a new substance standard for highly counterfeiting-resistant ID cards. Some checks are automated, but the ID card has to be also ready for personal inspection. It is a reason why there is a tendency towards integrated protection elements. Such elements integrate several different protection measures but must be still simple from the inspection point of view.

"The inspecting person takes an ID card, flip it over and can be sure about genuineness in a few seconds. Such inspection is not more difficult that inspection of an ordinary hologram. However, imitation is incomparably harder", says Petr Franc, Security Division Director in IQ Structures. "Two-sided holograms are challenging for designers. They need to place distinctive visual effects on both sides. We believe in the merge of technical projection of holograms and art design. We apply this integrated approach at our mastering centre and recommend it to our partners and customers."

Robert Dvorak, Business Development Manager in the same division, continues: "This new element integrates hologram and transparent window. Other tools can be added. Our technology also enables the fluent continuation of holograms to non-transparent areas of the card. Security graphics can be integrated as well. From the user point of view, a simple single unit is thus created. Any technical imperfection results in distortion of the appearance. Imitation is virtually impossible."

Integration of holograms with other protection elements has been a long term strategy of IQ Structures. In cooperation with a graphic Security software provider, JURA, IQ Structures demonstrated integrated designing of the card. The company also operates award-winning mastering centre combining laser, e-beam, nanoprinting and other technologies.

Note to editors
IQ Structures is a research and production company focused on optical nanotechnologies, especially strong in security, anti-counterfeit protection and lightening. Backed by 20-year experience, IQ Structures has built extensive research capacities, owns several patents, and operates a manufacturing unit with a capacity to protect more than 100 million polycarbonate ID cards a year. It has been awarded several international prizes for excellence and scientific innovation, including recent double awards by International Holograms Manufacturing Association. The company is settled in Řež, close to Prague, the Czech Republic.