In Search of New
Among most of remarkable reports many participants of Watermark Conference-2009 mentioned speech of Hans de Heij, senior staff member cash policy department of the central bank of the Netherlands, about innovative approaches to banknote design.

According to Hans de Heij the design of public security features should be improved drastically. “In our 2009 public survey we found again that the most well known features are: watermark (76%), hologram/foil (55%), security thread (15%), glossy gold stripe (2%) and colour changing ink (3%). We should cherish this public knowledge as gold. That is why I propose to keep the 2 to 4 best known security features and improve them. In total 6 public features on a banknote are enough: 3 to be promoted actively and the others are sleeping. So the new design could receive 2 to 4 completely new features.

What are the requirements to a new public security feature? Hans de Heij continues: “First the time needed to check the feature should be short, about 2 or 3 seconds. Checking 3 features would take already almost 10 seconds. Furthermore it is important that these features are easily found; they should be large and striking. The human eye should have no problem finding them. In the euro banknotes the 6 public features cover only 15% of the total space! This should be much more. The feature should lead to a clear decision: “yes it is real or no it is false”. It is also necessary for security features to keep its function when a banknote is worn-out. Finally all public features should be on the front of the note, since the public does not look at the reverse.”

To prove that sometimes even specialists are not very attentive to banknotes, Hans de Heij made an experiment. There was a slide with a 50-euro-banknote. It was asked to have a good look at the note and decide if this euro 50 note was OK. At first blush the banknote looked like a real one. Anyway it was very similar to a real one. “If you decide that it is real, you are not right. Look to the arch on this 50 euro banknote, in reality it is the arch of the 5 euro banknote! But the public did not notice the change”, Hans de Heij states.

The result consolidated with one more experiment — this time there was a transparency with a one-dollar-banknote. Again at first blush it looked like a real one. But it was not, because on the shown banknote the president looked the other way.

What can we conclude? If the public does not even see a large change in the main image, what will it see from a counterfeited banknote? Will the public notice the imitated (small) security features in a counterfeit. How may we
Hans de Heij “It is not so much the technology that is disappointing, but it is mainly the design and the perception that are falling. People do not know how to use them; security features are not evident enough and do not draw enough attention.”

Hans de Heij warns for so called ‘nested features’: a feature within a feature within a feature. Examples are holograms and the latest Spark. “It is for example difficult to remember a (part of a) feature which is changing colour or brightness. In psychology this phenomenon is called ‘change blindness’. People cannot remember what they just have seen and do not see the changing from bright to dark when they are tilting the note.”

The researches also show that the public attitude toward euro banknotes becomes more indifferent. “People do not have any emotions about the design of the euro banknotes. It is better to make banknotes more emotional, more attractive. If people like the notes they also will know more about it, including the security features!” But take care, the central bank should not exaggerate. An embryo on a banknote provokes too much emotion, as was recently the case in Switzerland.” — Hans de Heij noticed.
"It is necessary to change banknotes' image"

— In your speech you told that nowadays euro banknotes do not impress people. Do you make progress in developing new euro?
— Of course the euro will be changed, but it is difficult to say when. Nowadays there are 16 countries within the Eurosystem (and 27 within in the EU). All together I counted over 60 people being involved with the design of the new euro banknotes in all kind of committee’s, working groups and task forces. The more people, the more difficult it is to make good decisions. A thorough Programme of Requirements for the new design would be very helpful. Also a project team with 4 or 5 people making proposals would more effective. I can also imagine that there would be three competitive design teams, each making a complete printing proof for a new euro banknote. The Governing Council of the Eurosystem just has to make a choice!
— How much time has the commission already been working?
— The decision to design new euro banknotes was taken in 2003. The first new note would be issued by the end of this decade, so in 2008 or 2009. Later the issuing date was moved to 2011, but also this date will not be met. The final date has not been determined yet.
— What are the main difficulties?
— The selection and production of the new security features. Making the design is difficult, but also several paper mills and printing works should be able to produce the new note. That is why there are many obstacles.
— You appear for simplification of banknote design and suggest removing portraits and building images. And what do you suggest instead of them?
— I suggest going back to the two main functions of a banknote: value recognition and a security check. The portraits or the building are not contributing to these two functions. Since they use so much space, they should be removed or scaled down drastically. Instead I propose to make more public friendly features. I would not use the numerals or the currency symbol for the public security features, but instead I would use attractive images like for example the Mona Lisa for a watermark in the euro 50. On the 200 euro I would propose security features based on the Eiffel tower. Working this way would provide a clear European identity to the note. Not by adding non-existing windows and bridges but by a clear design philosophy and communication plan. Public research in the Netherlands confirmed this view. Finally the EU-flag will be enough to complete the European identity of the euro notes.