

# A personal review

Holger Zeltwanger

It was in 1991, at the Systems exhibition in Munich (Germany), when several companies had introduced board-level products with CAN interfaces. I was in those days the editor of the German VME-bus magazine. Discussing with the CAN module manufacturers compatibility issues, I understood that even the physical layer was different. Most of them had implemented a modified EIA 485 circuitry. Back in my office, I studied the CAN protocol in more detail and was fascinated by this robust and reliable communication protocol. I decided to invite some companies for a meeting to discuss the compatibility issues, and I rented a meeting room in a hotel close to my home. Although I had invited just a view companies for the meeting held in January 1992, 23 parties showed up. Of course, the rented room was too small. Nevertheless, we discussed in this meeting not only the physical layer compatibility problem, but also the need for a standardized application layer. All participants were German. This might be the reason, why we decided to legally form a non-profit association. The participants asked me to organize a follow-up meeting and to prepare the foundation of a nonprofit association in accordance with German laws.

In March 1992, we established the CAN in Automation users' and manufacturers' group as a non-profit association. I was elected as member of the board of directors and charged to op-

letter was released. It was a copied newsletter with just a few pages. Today it is a well-established printed magazine, and the CAN Newsletter Online is just introduced.



*The early days of CiA: In mid of the 90ties, CiA organized joint stands at the Hanover Fair Industry demonstrating the usage of CAN and CANopen in industrial applications (this photo shows some exhibiting member on the CiA booth of 1995)*

The CiA organization grew slowly. Not so the work: The members decided to exhibit jointly on the Interkama 1992 fair in Duesseldorf (Germany). And more, they decided to demonstrate interoperability of their CAN products. Additionally, the inquiries to the CiA international headquarters increased quickly. The work for CiA captured most

of my free times in the evenings and at the weekends. But I still worked full-time at home as an editor. Together with my wife and my older daughter (she was a child of just six years) we watched TV and enveloped letters

erate the CiA office. In fact, it was a home office. As an editor, I had the idea to publish a newsletter about CAN technology. Already in June, just three month after establishing the CiA, the first issue of the CAN News-

letter was released. It was a copied newsletter with just a few pages. Today it is a well-established printed magazine, and the CAN Newsletter Online is just introduced.

## Milestones

- 1992: CAN Newsletter
- 1992: Joint stand at Interkama
- 1992: CiA 102 (physical layer)
- 1993: CiA 200 series (CAL)
- 1994: Joint stand at Hanover Fair
- 1994: First iCC
- 1994: CiA 301 (CANopen)
- 1995: Office in Erlangen
- 1995: 100 members
- 1995: CiA 401 (I/O profile)
- 1997: CiA 402 (drive profile)
- 1997: 200 members
- 1998: CANopen product guide
- 1998: CANopen product certification
- 1999: 300 members
- 2001: CiA 304 (CANopen-Safety)
- 2003: 400 members
- 2003: Office in USA
- 2003: CiA 417 (CANopen-Lift)
- 2008: Office in Nuremberg
- 2008: 500 members
- 2009: Office in India
- 2011: Office in China



*Entering vertical markets: Nowadays, CiA joint stands are only needed in vertical markets such as the shown booth at the Interlift 2011 in Augsburg (Germany), the world largest event for lift/elevator suppliers*

(email was not widely used in those days) and the CAN Newsletter. In 1994, I organized the first international CAN Conference with about 200 participants - still without any secretary or back-up office.

In 1995, I rented an office in the neighbor village and hired a half-time secretary on a freelancer basis. It was Gisela Scheib, who is still working with CiA, and many of you know her. The CiA association grew constantly. I tried to avoid any involvement in the so-called "fieldbus war". As an editor, I knew most of the German editors in the field of electronics and automation. This might be a reason, why CiA has bypassed the "war". Another reason was that CiA had not tried to standardize its CAN Application Layer (CAL).

The increasing number of CiA members put more burdens to the CiA office. So, CiA hired more staff. Today we are 14 employees in the CiA office, which is nowadays a real international headquarters. In the 20 years history, CiA operated also offices in the USA, in India, and in China. The Chinese representation office established last year



*Long cables: During plug-fest, CiA members stress their CANopen devices and proof the interoperability*

is still in operation. The others have been closed. To be serious, I am in favor of decentralized organizations with highly responsible individuals. But this requires a lot of daily co-ordination and discussions; otherwise efficiency decreases dramatically. The time difference to Europe was one problem and that in other countries the companies do not behave as altruistic as in Central and North Europe. CiA has still the largest communities in Germany, Switzerland, and Scandinavia.

Looking back, I have worked with several members very closely in the board of directors and in the CiA technical as well as CiA

marketing groups. In general, I have to say that there was nearly always a friendly atmosphere even between competing companies.

Also in the CiA office, employees were coming and going. And some are working since many years for CiA, e.g. Thilo Schumann, the "senior" among the engineers, and Ute Eisenhoefer, who administers the technical groups since many years. Since several years, CiA provides apprentices the possibility to become certified secretaries. This is our small contribution to qualify and to educate the next generation. Of course, we also offer young engineers

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*In 1992,  
Holger Zeltwanger  
initiated the establishment  
of the non-profit CiA organization. Since 20 years,  
he is a member of the  
CiA board of directors.  
He leads the ISO task  
force "CAN", and he is  
member of several  
other working groups  
in ISO and IEC.*

#### **Links**

[www.can-cia.org](http://www.can-cia.org)  
[www.can-newsletter.org](http://www.can-newsletter.org)



*CiA staff in Nuremberg (from left to right): Holger Zeltwanger, Oskar Kaplun, Gisela Scheib, Silvia Löbel, Ute Eisenhöfer, Julia Adolf, Reiner Zitzmann, Cindy Weißmüller, Mark Buchert, Birgit Rüdell, Christina Merling, Thilo Schumann, and Carlos Grünsteudel; Clementina Eisele and Olga Fischer are in parental leave*

## In memoriam to Ennit Hubert

Ennit Hubert, our web-master, passed away unexpectedly end of last year. She studied ethnology, African as well as German languages and literature. Since the year of 2000, she designed websites, in the beginning as freelancer and than she worked with Pulsar Interactive Media.

In April 2007, she joined CiA Office and designed the CiA website and layouted the CAN Newsletter as well as other CiA publications. She was also responsible for the production of the CiA product guides. We will miss her kindness and friendliness, an attitude that she had even in times of high workload. In the last months, she developed the prototype of the CAN Newsletter Online with huge enthusiasm.

*Holger Zeltwanger*

and other "newcomers" in our seminars the opportunity to learn something about CAN technologies. I have performed personally more than 1000 seminars and trainings in the last 20 years. This required a lot of traveling. Some of you may think: He has seen so many countries, he should be very happy. Actually, I have seen many hotels, conference centers, and airports. Okay, that's not all. I met many interesting and kind people, which I would not like to miss. Yes, I have many business partners all over the world, and some have even become friends.

On the other hand, I lost sometimes the contact to my family and friends at home, because of the many business trips (in some years more than four month). This is the price I paid.



*Carol Li serves Chinese customers from her office in Guangzhou*

The CAN users surprise me even today. There are so many new applications, which I never thought that they would use CAN technology: coffee machines, Pedelecs, sub-sea instruments, etc. Last year, I was surprised by the membership increase of about 50 companies. Perhaps this year, I will be surprised by the success of the CAN-FD protocol and its impact on the CANopen technology. I hope that also the success of the CAN Newsletter Online will surprise me. It is up to you, to surprise me furthermore.

If you would ask me, if I would do it again – to initiate the CiA and to manage this organization – my answer is: Yes!

## CiA staff in Nuremberg and Guangzhou

Currently, the CiA office in Nuremberg employs 13 people including two apprentices. Five engineers are supporting CiA members in the development of specifications and recommendations. They also respond to technical questions coming in via email, fax, or telephone. In addition, CiA staff organizes conferences, seminars, stands on fairs. CiA's employees also publish magazines, product guides, and of course CiA's website. ◀

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## Exhibitions



Hannover Messe, Hanover  
23. – 27.04.2012  
Hall 11, Booth F31



Sensor + Test, Nuremberg  
22. – 24.05.2012  
Hall 12, Booth 604

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