



The Consumer Voice in Europe

What Privacy, Security and Consumer Rights for the Internet of Things?

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BEREC workshop “Enabling the Internet of Things”

Brussels, 01 February 2017

Test Case: Connected Toys



Via a mobile application and a Bluetooth connection 'my friend Cayla' connects to the internet to answer questions. To this end 'my friend Cayla' uses speech recognition technologies.

In 2016 the Norwegian Consumer Council carried out an investigation about how 'my friend Cayla' operates and interacts with children.

The results are far from encouraging showing serious privacy, consumer protection and security concerns...

PRIVACY

Privacy

- No indication of what type of data is collected
- Data collected for purposes beyond what is strictly necessary (data minimisation)

*“ToyQuest and its Licensors **may collect the contact names that appear in your address book** as part of the Services to tune, enhance and improve the speech recognition and other components of the Services, **and other services and products of ToyQuest and its Licensors.**”*

(Cayla and i-Que user agreement, emphasis added).

Privacy

- Data shared with third parties....

“When you ask the App a question, this information request is stored on a Nuance Communication (for Apple-based users) or IVONA or Google (for Android/Google based users) server in the cloud. Collectively, Nuance and IVONA are our third party software partners (“Licensors”).”

(Cayla and i-Que user agreement)

- ... with extremely broad privacy notices.

*“**Nuance (or Nuance vendors and suppliers) may observe your activities**, preferences, and transactional data (such as your IP address and browser type) as well as related usage behavior depending on whether you are using our Website or a particular Nuance Product. **We may use this data for any purpose** unless we tell you otherwise in connection with a particular Website or product.”*

Nuance privacy policy, emphasis added

News > Business > Business News

Your child's doll could be spying on them, privacy group warns

Two internet-connected toys have been called out by consumer protection groups for turning over data collected from conversations with children to companies without permission

Zlata Rodionova | Monday 12 December 2016 | 7 comments

By AIMEE PICCHI / MONEYWATCH / December 7, 2016, 5:00 AM

Your kids' toys could be spying on your family

7 Comments / f Share / Tweet / Stumble / @ Email

When parents give their kids a holiday gift, they probably aren't considering whether the toy might be listening in on their conversations.

But Genesis Toys' My Friend Cayla doll and the i-Que Intelligent Robot allegedly have the capabilities to eavesdrop on children and their families, potentially violating laws that protect children's privacy. That's according to a new complaint filed with the Federal Trade Commission from a coalition of consumer privacy advocates including the Electronic Privacy Information Center (EPIC). The toys allegedly send recordings to speech-to-text software company Nuance Communications, which the complaint notes has contracts with military and law enforcement agencies.

With everything from toys to cars now incorporating wireless internet connections, privacy experts are increasingly raising concerns about how these consumer goods open the door to hackers, privacy violations and other problematic behaviors. Last year, Mattel (MAT) found itself in hot water for its "Hello Barbie" doll, which is enabled with WiFi and could be used to collect information about kids and their families that could later be used for marketing.

PRIVACY SECURITY SURVEILLANCE TECHNOLOGY NEWS

After Spying Webcams, Welcome the Spy Toys "My Friend Cayla and I-Que"

Privacy advocates claim both toys pose security and privacy threat for children and parents.



by Carolina 2 months ago

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Call for privacy probes over Cayla doll and i-Que toys

By Chris Baraniuk Technology reporter

6 December 2016 | Technology

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CONSUMER RIGHTS

Consumer rights

- Advertising to children
- Product placement: pre-programmed phrases endorsing commercial products.

*“Genesis may display **targeted advertisements based on anonymised information, personally identifiable information or information you make publicly available.**”*

(Cayla and i-Que privacy policy, emphasis added)

Consumer rights

Hidden marketing

I've seen the little mermaid maybe only 100 times (giggle) It is my number one, blue ribbon, favorite movie ever.

I love Aladdin. It's a great movie.

My favorite candy bar is Butterfinger. It is so crunchy and sweet!



I love the Winnie the pooh movie. My favorite characters are Winnie, Piglet, and Rabbit. Tigger is funny.

My sister has Pandora on her iPhone and I really love it. I like Pandora because it helps me find songs that I would like.

I love going to Disneyland. I like to ride all the rides there. My mom and dad love it too. I would go there everyday if I had my wish.

SECURITY

Security

- No embedded security.
- No need to have access to the doll to connect to it.
- Very easy to 'hack' and talk through the doll to the kid.

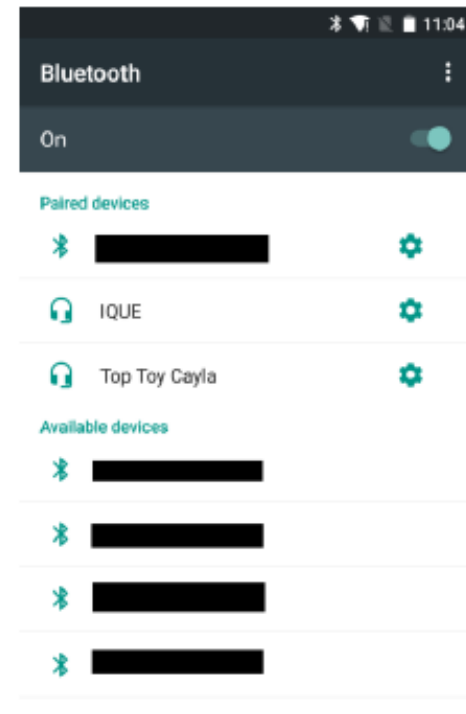
Connecting to i-Que and Cayla

Turn on toy

Turn on Bluetooth on phone

Press «connect»

You can now play sounds through the toy!

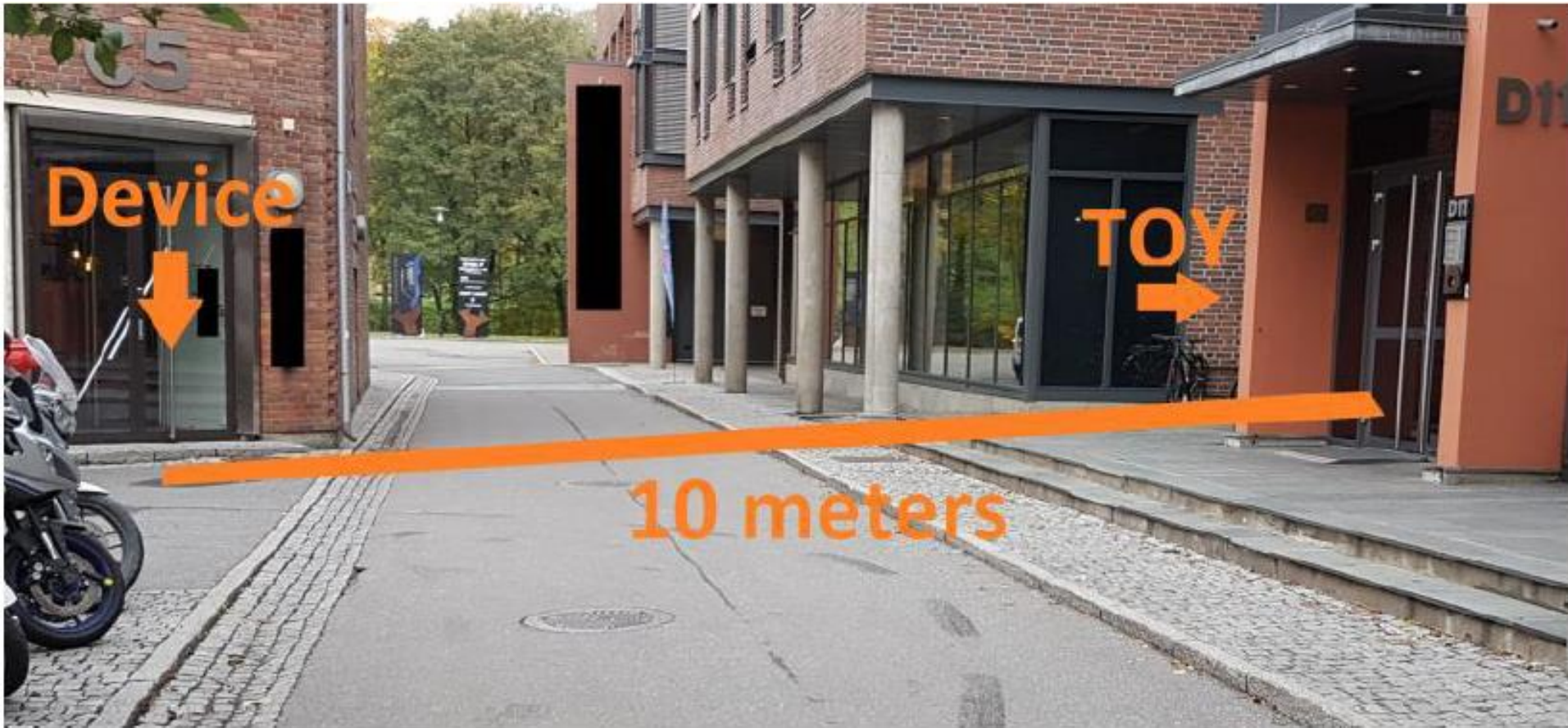


Bluetooth connection

- 13 meters away to connect
- Can keep connection for 20 meters in open space
- Little loss of sound quality



Bluetooth connection



This risk could have been avoided

- By making physical access to the toy required;
- Random code printed on the toy;
- By requiring the user to press a button to pair;
- And... by giving the toy a less obvious Bluetooth name.

Overview of the action

- Participation: **24 organisations** in **18 countries**.
- Authorities formally notified in 10 countries.
- Large toy chains in **Netherlands and Belgium stopped sales**. **Stores in Denmark, Norway and Sweden offer refunds** to consumers. **Amazon** reportedly stopped selling the doll.
- **BEUC** and **ANEC** sent letters to relevant authorities in the Commission (DG JUST, DG GROW and DG CNECT), to the CPC - Net, ICPEN, Working Party 29 (Data Protection), EDPS.

(Some) outstanding policy questions

- **Privacy:** How to ensure the effective implementation of the ‘privacy by design’ principle?
- **Data ownership:** Who ‘owns’ (and can give access to) the data generated by the machine?
- **Consumer rights:** How to include the IoT in the consumer law acquis?
- **Health and safety:** Is the safety definition of the GPSD fit for purpose?
- **Product liability:** What about damages caused by malfunctioning software?
- **Interoperability:** How to prevent lock-in effects?
- **Competition**
- **Monitoring and enforcement:** A holistic approach is needed through the co-ordination between national and EU agencies.



Self-regulation is not the solution.



Thank you

The Consumer Voice in Europe

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