

NorDig response to HbbTV liaison letter:

Concerning HbbTV and Recent “Smart TV Hacking” Talk and Demonstration

To: Klaus Illgner, Chair HbbTV (illgner@irt.de)
From: Per Tullstedt, Chair NorDig Technical Group (per.tullstedt@teracom.se)
Erik Vold, Chair NorDig API/HbbTV subgroup (erik.vold@nrk.no)
CC: Jon Piesing, vice-Chair, (jon.piesing@tpv-tech.com)
Ingve Bjercknes, Chair NorDig Executive Committee (ingve.bjercknes@nrk.no)
Date: 3rd July 2017

Background

HbbTV have sent a Liaison letter to NorDig organisation (17th May 2017) as user of HbbTV specification concerning the recent “**Smart TV Hacking**” talk and demonstrations. HbbTV asks for feedback from users of HbbTV specification (like NorDig/members) about this subject in general and when or if solutions are likely to be needed or deployed in the market. This to help inform HbbTV’s discussions on the priority and timing for HbbTV developing and reviewing of test streams for the DVB specification. (Letter included three specific questions and HbbTV would prefer reply before summer break 2017).

NorDig response

NorDig identifies the relevance of HbbTV questions and the importance. The topic has, to some extent, been discussed inside NorDig during 2016 and NorDig Technical group monitor HbbTV and DVB’s work around this (like the DVB’s bluebook TS 102 809) as potentially inclusion into future version of NorDig Unified Receiver/IRD requirement specification.

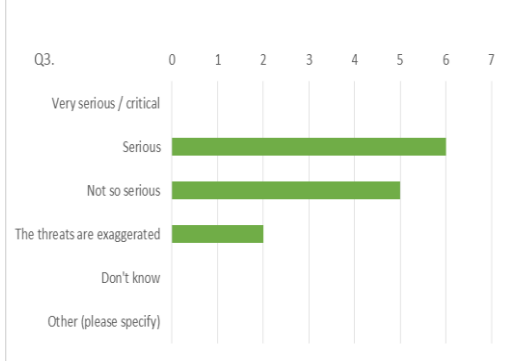
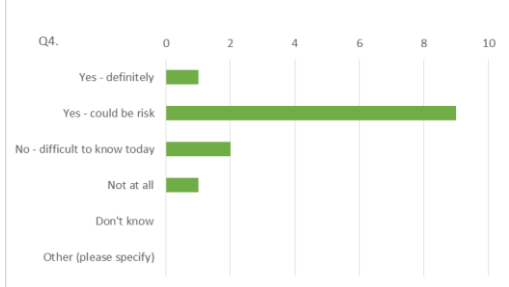
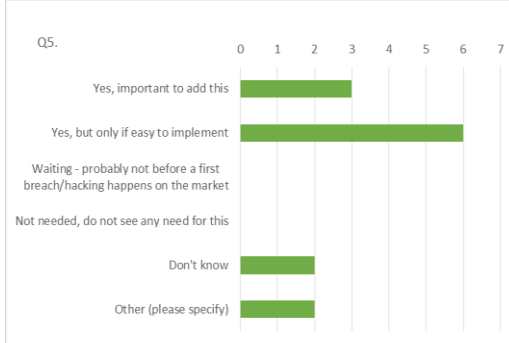
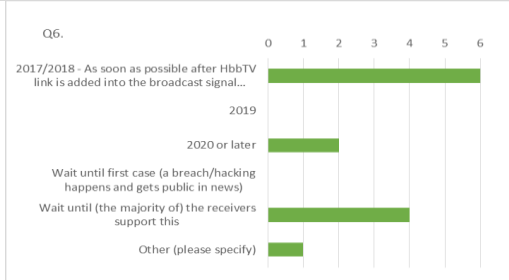
NorDig as a user of HbbTV specifications are most thankful for HbbTV’s work so far with establish specifications, test suits etc and now for considering this question. In order to help HbbTV with feedback, NorDig has sent out a shorter on-line survey among our members (Broadcasters and Operators) during May/June 2017, based upon HbbTV questions. Due to the start of summer vacations, NorDig’s API/HbbTV subgroup or Technical group have not had time to discuss and come with conclusion and comments of the results from our NorDig survey (Techn and API group have no schedule meetings before summer break to discuss this). Instead, we provide to HbbTV our “unfiltered” results from this survey below and hope this is enough at this stage. NorDig managed to get response from 13 of our NorDig members on this survey.

Best regards,

Per Tullstedt, Chair NorDig Technical Group (per.tullstedt@teracom.se)
Erik Vold, Chair NorDig API/HbbTV subgroup (erik.vold@nrk.no)

Results from NorDig “Man-in-the-middle” survey:

In total **13 responders** (7 Broadcasters, 5 Operators and one Other/manufacture). (First two questions was about type of company (Broadcaster/Operator/Other) and company name, these are not included here).

<p>Q3. How serious a threat to consumers do you believe this kind of attack to be, taking into account the DVB analysis that a drive-by attacker may need 30 attacks to get a single victim?</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Very serious / critical</td> <td>0</td> </tr> <tr> <td>Serious</td> <td>6</td> </tr> <tr> <td>Not so serious</td> <td>4</td> </tr> <tr> <td>The threats are exaggerated</td> <td>2</td> </tr> <tr> <td>Don't know</td> <td>0</td> </tr> <tr> <td>Other (please specify)</td> <td>0</td> </tr> </tbody> </table>	Response	Count	Very serious / critical	0	Serious	6	Not so serious	4	The threats are exaggerated	2	Don't know	0	Other (please specify)	0
Response	Count														
Very serious / critical	0														
Serious	6														
Not so serious	4														
The threats are exaggerated	2														
Don't know	0														
Other (please specify)	0														
<p>Q4. Even if you don't believe this kind of attack is a real threat to consumers, do you believe fear and anxiety about this kind of attack are a threat to the overall connected TV ecosystem in your market?</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Yes - definitely</td> <td>1</td> </tr> <tr> <td>Yes - could be risk</td> <td>9</td> </tr> <tr> <td>No - difficult to know today</td> <td>2</td> </tr> <tr> <td>Not at all</td> <td>1</td> </tr> <tr> <td>Don't know</td> <td>0</td> </tr> <tr> <td>Other (please specify)</td> <td>0</td> </tr> </tbody> </table>	Response	Count	Yes - definitely	1	Yes - could be risk	9	No - difficult to know today	2	Not at all	1	Don't know	0	Other (please specify)	0
Response	Count														
Yes - definitely	1														
Yes - could be risk	9														
No - difficult to know today	2														
Not at all	1														
Don't know	0														
Other (please specify)	0														
<p>Q5. Do you see interest in deploying the new DVB security solution in your market? (DVB security solution in short: typically adds authentication message to HbbTV link in broadcast in order for consumer receivers to validate link).</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Yes, important to add this</td> <td>3</td> </tr> <tr> <td>Yes, but only if easy to implement</td> <td>6</td> </tr> <tr> <td>Waiting - probably not before a first breach/hacking happens on the market</td> <td>0</td> </tr> <tr> <td>Not needed, do not see any need for this</td> <td>0</td> </tr> <tr> <td>Don't know</td> <td>2</td> </tr> <tr> <td>Other (please specify)</td> <td>2</td> </tr> </tbody> </table> <p>Comments (Other):</p> <ul style="list-style-type: none"> - “Depends on if it can be added to older TV devices in people's homes”. - “Our Company <Broadcaster> is using https for all streaming services to avoid Man-in-the-middle attacks and think this covers current demands”. 	Response	Count	Yes, important to add this	3	Yes, but only if easy to implement	6	Waiting - probably not before a first breach/hacking happens on the market	0	Not needed, do not see any need for this	0	Don't know	2	Other (please specify)	2
Response	Count														
Yes, important to add this	3														
Yes, but only if easy to implement	6														
Waiting - probably not before a first breach/hacking happens on the market	0														
Not needed, do not see any need for this	0														
Don't know	2														
Other (please specify)	2														
<p>Q6. If interest to deploy the new DVB security solution, when would You like to deploy it (assuming receiver support)?</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>2017/2018 - As soon as possible after HbbTV link is added into the broadcast signal...</td> <td>6</td> </tr> <tr> <td>2019</td> <td>0</td> </tr> <tr> <td>2020 or later</td> <td>2</td> </tr> <tr> <td>Wait until first case (a breach/hacking happens and gets public in news)</td> <td>0</td> </tr> <tr> <td>Wait until (the majority of) the receivers support this</td> <td>4</td> </tr> <tr> <td>Other (please specify)</td> <td>1</td> </tr> </tbody> </table> <p>Comments (Other):</p> <ul style="list-style-type: none"> - “See Q6. Company <Broadcaster> has no further plans in this area for the moment” [NorDig remark, assume responder refers to Q5 and not Q6] 	Response	Count	2017/2018 - As soon as possible after HbbTV link is added into the broadcast signal...	6	2019	0	2020 or later	2	Wait until first case (a breach/hacking happens and gets public in news)	0	Wait until (the majority of) the receivers support this	4	Other (please specify)	1
Response	Count														
2017/2018 - As soon as possible after HbbTV link is added into the broadcast signal...	6														
2019	0														
2020 or later	2														
Wait until first case (a breach/hacking happens and gets public in news)	0														
Wait until (the majority of) the receivers support this	4														
Other (please specify)	1														

Annex

More detailed results from NorDig survey (replies depending on company type). NorDig assume HbbTV main interest are to get the view in these questions independently if responder's represent a Broadcaster or an Operator/distributor (above results). But, in case of HbbTV have some interest to see how different company categories has responded, see below.

