MUSICES ­­– *Musical instrument computed tomography examination standard* – is a project funded by Deutsche Forschungsgemeinschaft (DFG) and running from 2014 to 2017 aiming to create a standard for 3D computed tomography of musical instruments. The project is lead by Germanisches Nationalmuseum, Nürnberg, Germany, and Fraunhofer EZRT, Fürth, Germany.

For further details please consult the description and documents on:

German: <http://www.gnm.de/forschung/forschungsprojekte/musices/>

English: <http://www.gnm.de/en/research/research-projects/musices/>

The project group is composed of curators, conservators and CT specialists, and we feel the need to consult you as an expert or somehow interested person: curator, restorer, collector, researcher, maker, technician, acoustician, player and every other role and interest that links you to musical instruments.

A standard is only viable and sustainable if it takes in consideration the needs of those who will use it directly or use the results of 3D-CTs of musical instruments.

* **To achieve the best possible outcome, we would like to ask your help in filling out the attached questionnaire.**
* **Please note that you need not to answer all the questions, e.g. for instruments you are less familiar with, but the more information you can provide, the more this will be helpful for us.**
* **Do not hesitate to spread this questionnaire to interested persons whom we possibly didn’t reach with our mailings**
* **You can enter your answers in English, French, or German**
* **It would be helpful to receive your answer until 4th of March 2016.**

Please save this document including your name in the file name and send it to Sebastian Kirsch: [s.kirsch@gnm.de](mailto:s.kirsch@gnm.de)

**Thank you for your collaboration!**

**Information about yourself**

This information will allow us to come back to you if there are any questions. Your E-mail address will not be used for other purposes than for those of the MUSICES project.

Name: Please click here and write

Institution or affiliation if applicable: Please click here and write

Country: ­­­­­­­­­­­­­­­Please click here and write

E-mail:­­­­­­­­­­­­­ Please click here and write

What is your relationship with (historic) musical instruments (e.g. curator, researcher, maker, collector …): Please click here and write

**Questions**

**Part 1: Possibilities of 3D-CT technology and research questions**

So far, most 3D-CT examinations have been made on woodwind and (bowed) string instruments. The MUSICES project aims to extend this scope to other types of instruments.

Although MUSICES aims to make 3D-CT-scans more accessible and affordable, this technology will probably not become cheap and easily available on-site in museums in the short run.

* Which kinds of question do justify such examinations, and which results can be obtained through 3D-CT only?

Please click here and write

* Which are, in your opinion, the advantages of 3D-CT-scanning compared to other methods?

Please click here and write

* Which are, in your opinion, possible disadvantages and drawbacks of 3D-CT-scanning compared to other methods?

Please click here and write

* Please consider the following list of instrument types. Can you tell us for one or several of them what kind of examinations and results you expect being able to do through 3D-CT-scans? – Concrete showcases are welcome.

Proposed instrument groups: *Recorders and flutes / Reed woodwinds / Stringed keyboard instruments / Bowed string instruments / Plucked string instruments / Dulcimers, zithers / Automatic musical instruments / Brass wind instruments / Membranophones / Idiophones / Any other instrument type (please specifiy):*

Please click here and write, specify instrument group(s)

* Do you have any additional comments on this section?

Please click here and write

**Part 2: Regions of interest – ROI**

For many research questions it is not necessary to have a high-resolution 3D-CT of an entire instrument if defined details are regularly of special interest, as such big data volumes are difficult to handle, to store and to communicate. Well defined regions of interest can be scanned apart with a higher resolution to make the file easier to work with.

* Can you define such regions of interest for instrument types you are familiar with or interested in? – Again, concrete showcases are welcome.

Proposed instrument groups: *Recorders and flutes / Reed woodwinds / Stringed keyboard instruments / Bowed string instruments / Plucked string instruments / Dulcimers, zithers / Automatic musical instruments / Brass wind instruments / Membranophones / Idiophones / Any other instrument type (please specifiy):*

Please click here and write, specify instrument group(s)

* Do you have any additional comments on this section?

Please click here and write

**Part 3: Technical issues**

The MUSICES tries to improve 3D-CT methods, but is bound to physical laws. Combinations of very high density and very low density materials will always be a challenge, e.g. between metal and wood, and may lead to a lower image quality.

* Are there any metal parts in instrument groups you are familiar with that could be removed so that the resulting 3D-CT still might answer your questions (please specify)? – Please take in consideration issues on conservation, too.

Please click here and write

* Do you have any additional comments on this section?

Please click here and write