

Statement by Submitter

I, Stjepan Picek, of Delft University of Technology, Van Mourik Broekmanweg 6, 2628 XE Delft, The Netherlands, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment I do hereby agree to provide the statements required by Sections 2.4.2 and 2.4.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed:

Picek

Title: Mr.

Date: 19 March 2019

Place: Delft, The Netherlands

Statement by Submitter

I, Debdeep Mukhopadhyay, of Indian Institute of Technology, Kharagpur, India - 721302, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

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Signed: Debdeep Mukhopadhyay

Title: Prof.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Submitter

I, Sikhar Patranabis, of Indian Institute of Technology, Kharagpur, India - 721302, do hereby declare that the cryptosystem, reference implementation, or **optimized implementations** that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

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I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: Sikhar Patranabis

Title: Mr.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Submitter

I, Rajat Sadhukhan, of Indian Institute of Technology, Kharagpur, India - 721302, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

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Signed: *R. Sadhukhan*

Title: Mr.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Reference/Optimized/Additional Implementations Owner(s)

I, Rajat Sadhukhan, of Indian Institute of Technology, Kharagpur, India - 721302, am the owner of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed: *R. Sadhukhan*

Title: Mr.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Submitter

I, Nilanjan Datta, of 203 B.T.Road, Indian Statistical Institute, Kolkata, India - 700108, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment I do hereby agree to provide the statements required by Sections 2.4.2 and 2.4.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: *Nilanjan Datta*

Title: Dr.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Reference/Optimized/Additional Implementations Owner(s)

I, Nilanjan Datta, of 203 B.T.Road, Indian Statistical Institute, Kolkata, India - 700108, am the owner of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed: *Nilanjan Datta*

Title: Dr.

Date: 19 March 2019

Place: Kharagpur, India

Statement by Submitter

I, Ashrujit Ghoshal, of Paul G. Allen School of Computer Science and Engineering, University of Washington, Seattle, WA 98195, USA, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, is my own original work, or if submitted jointly with others, is the original work of the joint submitters. I further declare that (check at least one of the following):

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- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as TRIFLE, may be covered by the following U.S. and/or foreign patents: none;
- I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

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Signed: 

Title: Mr.

Date: 19 March 2019

Place: Seattle, WA, USA