# 2023 R&D Tax Credit Documentation

**DeepShield Systems, Inc.**

**For Tax Year Ending December 31, 2023**

**Prepared: January 10, 2024**

## 1. Executive Summary

This documentation supports DeepShield Systems, Inc.'s ("Company") claim for Research & Development Tax Credits under IRC  41 for qualified research activities conducted during tax year 2023. The Company has undertaken substantial qualified research in developing advanced industrial control system (ICS) security solutions and critical infrastructure protection technologies.

## 2. Qualified Research Projects

### 2.1 Primary R&D Initiatives

The following research projects meet the four-part test under IRC  41(d):

a) Project DEEPGUARD-X

- Development of AI-driven threat detection algorithms for maritime OT environments
- Total qualified expenses: $4,827,500
- Primary researchers: Dr. Elena Rodriguez, James Morrison
- Technical uncertainty: Novel application of machine learning to subsea infrastructure protection

b) Project QUANTUM-SHIELD

- Research into quantum-resistant encryption protocols for SCADA networks
- Total qualified expenses: $3,654,000
- Primary researchers: Dr. Marcus Chen, Sarah Blackwood
- Technical uncertainty: Integration of post-quantum cryptography with legacy ICS systems

## 3. Qualification Analysis

### 3.1 Business Component Test

Each research initiative satisfies the business component test by developing new or improved:

- Business products
- Manufacturing processes
- Computer software
- Techniques
- Formulas
- Inventions

### 3.2 Process of Experimentation

Documentation maintained demonstrates systematic evaluation of alternatives through:

- Modeling and simulation
- Systematic trial and error
- Prototype development
- Testing and refinement cycles

## 4. Qualified Research Expenses (QREs)

### 4.1 Wage QREs

Total 2023 Qualified Wages: $8,245,000

- Direct research personnel: $5,870,000
- First-level research supervision: $1,575,000
- Direct support activities: $800,000

### 4.2 Supply QREs

Total 2023 Supply Costs: $1,245,000

- Testing materials: $685,000
- Prototype components: $425,000
- Consumable laboratory supplies: $135,000

### 4.3 Contract Research

Total 2023 Contract Research: $975,000

- University research partnerships: $575,000
- Third-party testing services: $400,000

## 5. Documentation and Substantiation

### 5.1 Technical Documentation

The Company maintains:

- Project planning documents
- Technical specifications
- Test protocols and results
- Research meeting minutes
- Progress reports
- Patent applications

### 5.2 Financial Documentation

Supporting records include:

- Payroll records for research personnel
- Time tracking systems
- Purchase orders and invoices
- Project accounting records
- Vendor contracts

## 6. Certification

The undersigned officers certify that:

All information contained herein is true and accurate to the best of our knowledge

The Company has maintained contemporaneous documentation supporting all claimed QREs

All claimed research activities meet the requirements of IRC 41

This documentation was prepared in accordance with Treasury Regulations 1.41-4

## 7. Legal Disclaimer

This documentation has been prepared solely for the purpose of supporting the Company's R&D tax credit claim. While reasonable efforts have been made to ensure accuracy, no warranty or representation is made regarding the eligibility of any specific expenses. The Company should consult with qualified tax advisors regarding specific circumstances.

## 8. Execution

EXECUTED this 10th day of January, 2024

DeepShield Systems, Inc.

**By: _**

Robert Kessler

Chief Financial Officer

**By: _**

Dr. Elena Rodriguez

Chief Security Architect

WITNESS:

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James Morrison

VP of Engineering