COMCAST

2022 COMCAST INNOVATION FUND

ANNUAL REPORT

Summary of the Fund's Operations
for the 2022 Operating Year

2022 Comcast Innovation Fund At-a-Glance

Background

We know that innovation defines the future of our company, our industry, and our connected world. Comcast is committed to fostering a culture of innovation that permeates every level of our business, and we've witnessed firsthand how some of the greatest breakthroughs occur when you simply give smart people the time and resources they need to innovate.

The Comcast Innovation Fund was established in 2013 to support researchers, technologists, and academics who are committed to the betterment of the Internet and the global technology and policy community.

Grants range from $3,000 for smaller projects, up to more than $100,000 for medium-term research efforts. A cross-functional team of technology and business leaders within Comcast reviews grant applications on a rolling basis and directs funding where it is most needed and can have the greatest impact.

In 2022, we funded 12 grants to researchers in 5 countries. Since the Fund's inception, Comcast has supported 189 projects from researchers in 16 countries around the world. We've been inspired by the results of this research and are committed to continuing the program into the future.

Focus on Impact

Through the Innovation Fund, we focus on small and midsized projects that may slip between the cracks of traditional research funding sources. The multidisciplinary team of subject matter experts that review applications look for research projects that move technology forward by tackling difficult problems or pioneering new approaches. In 2022, particular weight was given to projects that:

- Address cybersecurity, safety, and privacy threats that face our customers and our services;
- Create or advance important open-source projects;
- Advance the development and adoption of emerging open Internet standards;
- Improve the accessibility, stability, security, growth, and impact of the Internet;
- Improve the technical community's understanding of the Internet, transparency, and the customer experience via better measurement technologies;
- Advance and improve the customer experience of our services and contribute to the creation of better products;
- Develop tools to enable scalable & efficient deployment of new standards, such as routing security via Resource Public Key Infrastructure (RPKI), encrypted DNS protocols, multipath TCP, and Low Latency, Low Loss, Scalable Throughput (L4S);
- Study the risks of centralization;
- Improve IP video streaming and associated encoding tools.

Grant Types

We fund research grants, open source development grants, or a combination of the two.

- **Research Grants** – Unrestricted grants supporting research in a range of Internet-related fields that support researchers, technologists, and academics. These grants support researchers conducting either general or targeted research projects, usually at colleges and universities.

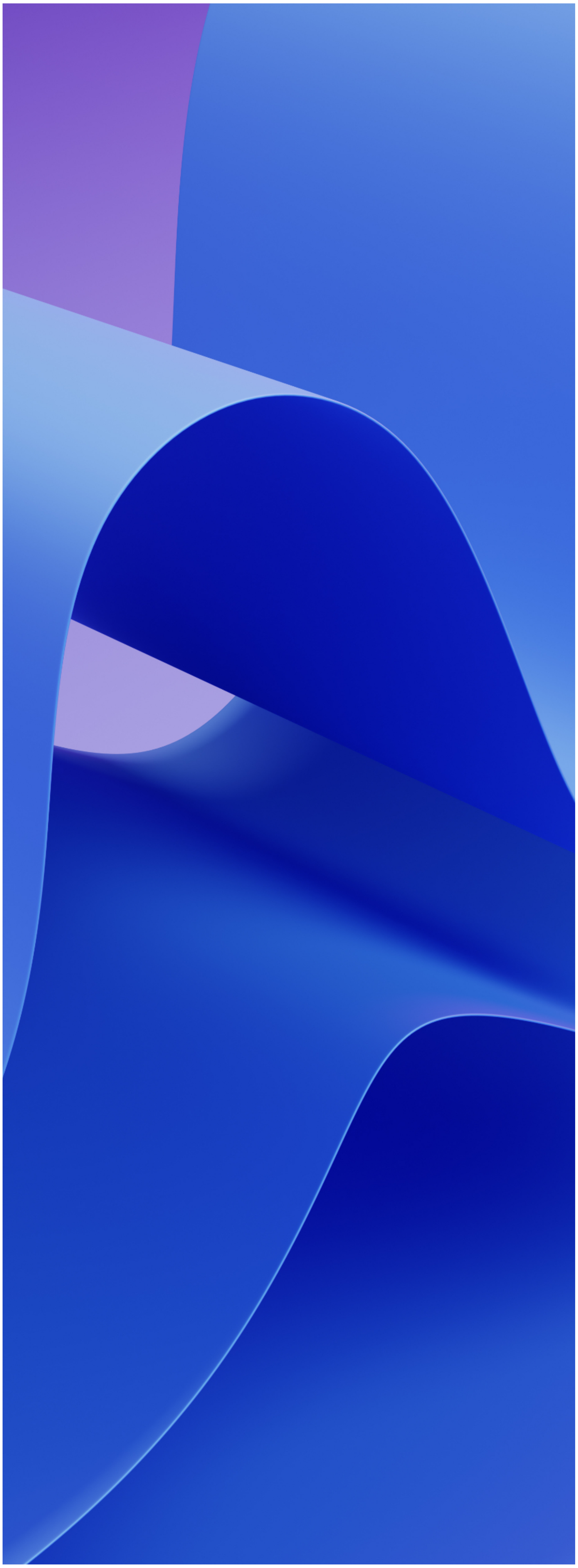
- **Open Source Development Grants** – These grants are intended to support the creation and/or advancement of open source projects of interest to Comcast or of benefit to the Internet and broadband industries, including those that may not have immediate business value but that carry the potential for important technological development.

Grants Made by Country in 2022

Australia	**01**
Czechia	**01**
Germany	**01**
United Kingdom	**01**
United States of America	**08**

2023 Grant Focus & How to Apply

We accept proposals throughout the year until our annual funding has been fully committed. To apply, visit the Innovation Fund web site at https://innovationfund.comcast.com.



Individual Grant Listing

Comcast Innovation Fund information is available at https://innovationfund.comcast.com.

Bob Briscoe
L4S: The Disappearing Internet, Phase 3

Northwestern University
A Global Index of Third-Party Dependency and Centralization on the Web

CZ.NIC
High-Performance DNS over QUIC Implementation Using XDP in Knot DNS

Princeton University
Co-Designing CDN Clients and Servers for Memory-Efficient Video Streaming

Deakin University
Experimental Implementation of New Multipath TCP and AQM in FreeBSD

University of Chicago
NetMicroscope Study of FWA Performance

Fraunhofer-Institute FOKUS
Improvements in Linear Streams

University of Colorado, Boulder
Broadband Measurement Portal

Indiana University
Mapping Data Use and Risks Using Data Technologies

University of Texas at Arlington
Using Social Media as a Novel Source for Identifying Active Phishing Threats

MulticoreWare
Open Source Codec Development for H.266/VVC Video Encoding Standard

Virginia Tech
Towards a Complete View of Route Origin Validation in RPKI