

NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC
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Date: 07 October 2024

Dear NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC,

SIF Project Direction ref: SWEST/REACH/SIFWSPFAR/Rd3_Alpha

NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC submitted Rural Energy and Community Heat (REACH) (the Project) to be considered for funding through the Alpha Phase of round 3 of the Strategic Innovation Fund (SIF). As explained in greater detail below, this Project previously received SIF Funding and completed a Discovery Phase for round 3 of the SIF. In our¹ SIF Funding Decision issued on 07 October 2024, we selected the Project² for conditional funding for the round 3 Alpha Phase and as a result we are now issuing this SIF Project Direction to implement that decision.

NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC must comply with the conditions contained in this SIF Project Direction as a condition of the Project receiving funding through the SIF. These conditions can be found in the Schedule to this document.

Progression through SIF Phases

The SIF consists of a multi-phase approach for Projects in order to mitigate the risk associated with innovations. The Discovery Phase focuses on feasibility, the Alpha Phase on experimental development, and the Beta Phase on deployment and demonstration.

¹ The terms 'we', 'us', 'our' refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

² Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in Appendix 1 of the SIF Governance Document.

The Project previously received SIF Funding for the round 3 Discovery Phase³ and submitted an Application for the Project to be considered for SIF Funding for the round 3 Alpha Phase of the SIF. As stated above, the Project has been selected by Ofgem to receive SIF Funding for the Alpha Phase of round 3.

Role of UK Research & Innovation (UKRI)

As per Chapter 1 of the SIF Governance Document⁴ the role of UKRI is to deliver the SIF in line with the SIF Governance Document - administering the funding programme, monitoring the delivery of Projects, collating data from Projects on benefits, making recommendations to Ofgem on operational matters, supporting third-party innovators and, where possible, successful Projects to become 'business as usual' activities. To support the success of the Projects and the SIF programme, we expect that the Funding Party and Project Partners collaborate with Ofgem and UKRI.

SIF Project Direction

Paragraph 5.14 of the SIF Governance Document states that a SIF Project Direction will:

- Set out the Project-specific conditions, to which the Funding Party is committing in accepting SIF Funding.⁵
- Require the Funding Party to undertake the Project in accordance with the commitments made in the Application. Where appropriate, the SIF Project Direction may therefore include extracts from the Application or refer to specific sections of the SIF Application.⁶
- Where applicable, set out conditions (such as Project stage gates) linked to milestones and deliverables, which Projects must meet.⁷
- Set out the SIF Approved Amount for the Project, that will form part of the calculation contained in the SIF Funding Direction issued by the Authority under chapter 7 of the SIF Governance Document.⁸
- Set out the Project budget that the Funding Party must report against and how variations in the Project budget will be reported.⁹
- Where applicable, set out special information sharing requirements applicable to the Project.¹⁰

³ The Project Directions for round 2 of the Discovery Phase are available at: <https://www.ofgem.gov.uk/publications/strategic-innovation-fund-round-3-discovery-projects-approved-funding>

⁴ <https://www.ofgem.gov.uk/decision/updated-sif-governance-document>

⁵ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁶ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁷ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁸ 'SIF Funding Amount' detailed under Point 5 – 'Condition President' of this SIF Project Direction.

⁹ 'Annex 1 – Project Budget.

¹⁰ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

- Set out the mechanism for the Funding Party receiving the SIF Approved Amount as set out in the SIF Funding Direction.¹¹

All SIF Project Direction requirements are detailed in the Schedule to this SIF Project Direction.

Decision

Provided the Funding Party complies with the SIF Governance Document and with the Schedule to this SIF Project Direction, the Project is deemed to be an Eligible SIF Project¹².

This SIF Project Direction constitutes notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.

Marzia Zafar

Deputy Director, Decentralisation & Digitalisation

For and on behalf of the Authority

¹¹ 'SIF Funding Amount' detailed under Point 5 – 'Condition President' of this SIF Project Direction.

¹² The meaning 'Eligible SIF Project' is described in Chapter 2 of the SIF Governance Document.

Schedule to SIF Project Direction

1. PROJECT DETAILS

SIF Project Direction reference: SWEST/REACH/SIFWSPFAR/Rd3_Alpha

Application number: 10125526

Project title: Rural Energy and Community Heat (REACH)

Innovation Challenge/Project Phase: Whole System Planning for Faster Asset Rollout /
Alpha Phase round 3

Project start date: 07 October 2024

Project end date: 30 May 2025

SIF Approved Amount for SIF Funding: £490,017

2. PREAMBLE

This SIF Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC (the "Funding Party") pursuant to the SIF Governance Document issued pursuant to Special Condition 9.9 of the Electricity Distribution Licence. It sets out the conditions to be complied with in relation to Rural Energy and Community Heat (REACH) (the "Project") as a condition of it being funded under the SIF Funding Mechanism.¹³

Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in the Licence or Appendix 1 of the SIF Governance Document.

References to specific sections of the Funding Party's Application in this SIF Project Direction are, for ease of reference, made by referring to the section number in the Funding Party's Application.

3. PROJECT SPECIFIC CONDITIONS

In accepting funding for the Project, the Funding Party is subject to the following Project-specific condition(s):

Condition 1

The Funding Party must not spend any SIF Funding until contracts are signed with the Project Partners named in Table 1 for the purpose of completing the Project.

¹³ The SIF Funding Return Mechanism is defined in the SIF Governance Document.

Table 1. Project Partners

Cranfield University
FRONTIER ECONOMICS LIMITED
KENSA UTILITIES LIMITED
REGEN SW
SMART GRID CONSULTANCY LIMITED
VEPOD LTD

Condition 2

The Funding Party must report on the financial contributions made to the Project as set out in its Application. Any financial contributions made over and above that stated in its Application should also be reported and included within the Project costs template.

Condition 3

The Funding Party must make reasonable endeavours to participate in all meetings related to the Project that they are invited to by Ofgem, UKRI and DESNZ during the Alpha Phase.

Condition 4

Alpha phase will last for a period of 8 months from the date the Project Direction is issued, the Project will be allowed a flexible start date within the 8 month period. The Project must provide the monitoring officer with the start date and must complete within 6 months of the start date and cannot be completed after the 8 month period has ended.

Condition 5

The Funding Party must provide to its monitoring officer by the end of the Alpha Phase comparisons with other innovative approaches to support rural communities in accelerating connection time.

4. COMPLIANCE

The Funding Party must comply with Special Condition 9.9 of the Electricity Distribution Licence, the SIF Governance Document and with this SIF Project Direction.

5. SIF APPROVED AMOUNT

The SIF Approved amount of £490,017 (as detailed under Section 1: Project details of this Project Direction) will be recovered by National Grid Electricity System Operator from GB customers and transferred to the Funding Party. The Funding Party is

responsible for notifying National Grid Electricity System Operator of the bank account details to which transfers must be made, in addition to completing Annex 2 of this SIF Project Direction. If a Funding Party is required to return funding to National Grid Electricity System Operator, the reverse applies. The Funding Party must provide bank account details to National Grid Electricity System Operator within two weeks of accepting this SIF Project Direction.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 of this SIF Project Direction.

The Funding Party must report on expenditure against each line under the category total in the Project Budget and explain any projected variance against each line as part of its detailed report which will be provided, in accordance with Chapter 7 of the SIF Governance Document. The Funding Party must report variations in the Project budget as outlined in Chapter 6 of the SIF Governance Document.

7. PROJECT IMPLEMENTATION

The Funding Party must undertake the Project in accordance with the commitments it has made in the Application and with the conditions of this SIF Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with its Application,
- (ii) complete the Project on or before the Project completion date as detailed under section 1 of the schedule of this SIF Project Direction, and
- (iii) disseminate the learning from the Project at least to the level described in chapter 3 of the SIF Governance Document. Dissemination of learning must be carried out whether the Project was concluded successfully or otherwise.

8. REPORTING

Ofgem and UKRI may issue guidance (and amend it from time to time) about the structure and content of the Project reporting required by Chapter 6 of the SIF Governance Document. The Funding Party must follow this guidance in preparing the reports.

As set out in chapter 6 of the SIF Governance Document, the Funding Party may be required to submit an end of Phase report to the UKRI monitoring officer for the round 3 Alpha Phase. An end of Phase report is required for the round 3 Alpha Phase if the

Project is not planning on submitting an Application to the round 3 Beta Phase and, if the Funding Party submits an Application for the Project for the round 3 Beta Phase but is not successful. Within this report, the Funding Party must submit information related to questions on Project delivery as detailed in chapter 6, table 6 of the SIF Governance Document.

9. MONITORING

The Funding Party must comply with any reasonable request for information by its monitoring officer at UKRI and related deadlines. Ofgem, with the support of UKRI, will together monitor Project delivery, impacts and benefits. Throughout the term of the Project, progress is monitored by UKRI through a monitoring officer. The monitoring officer is the first point of contact for official notifications, queries and correspondence with UKRI and the Authority, unless otherwise required by this SIF Project Direction.

As detailed in Chapter 6 of the SIF Governance Document, meetings with the monitoring officer will take place at regular intervals, as advised by Ofgem or the monitoring officer during the delivery of the Project, and at the end of each Project Phase.

10. EVALUATION

The Funding Party has acknowledged when it submitted its Application for this Project, that reporting information and data gathered during the Project's timescales (as detailed in Section 1 of this SIF Project Direction) will be used to evaluate Project performance. In addition, the Funding Party may be required to provide requested information outside of the Project timescales and, in particular, for the period from the Project end date to the end of the SIF Programme. Further data and reporting information may be requested (frequency and method based on requirement) outside of standard monitoring and reporting requirements as deemed necessary. Further data and information requirements must be complied with by the Funding Party and Project Partners.

11. DATA SHARING

As set out in Chapter 3 of the SIF Governance Document, the Funding Party must follow Data Best Practice Guidance with regards to all data gathered or created in the course of a Project. We expect the Funding Party to document any reasons, such as commercial sensitivities, for desensitising data. As defined by, and in accordance with, Data Best Practice Guidance, Funding Parties must have a data triage process. Where multiple Project Partners are collaborating on a Project, the consortium must adopt a consistent Open Triage Process for the data related to the Project. Ofgem may require that Project

information and data is also shared with other specified parties, such as parties working on complementary innovation funding programmes (subject to redaction of sensitive data).

12. CYBER SECURITY

It is the responsibility of the Funding Party and all Project Partners to implement and maintain appropriate security measures to protect personal data in accordance with The GDPR (General Data Protection Regulation)¹⁴ and DPA (Data Protection Act) 2018¹⁵. Protection of computer systems from unauthorised access or being otherwise damaged or made inaccessible must be in place alongside effective working practices. These must be maintained in line with the Funding Party's IT Management Strategies and policies.

13. PROJECT MILESTONES

The Funding Party must provide an outline in its end of Project Phase meeting with its UKRI monitoring officer that verifies the Project milestones have been achieved or explains why they have not.

Project milestones are outlined below in Table 3, based upon details contained within Question 7 and Appendix Question 9 in the Funding Party's.

¹⁴ https://ec.europa.eu/info/law/law-topic/data-protection/data-protection-eu_en

¹⁵ <https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted>

Table 3. Project milestone¹⁶

Reference	Project milestone	Deadline	Overall objectives and key tasks	SIF Funding Request
Milestone 1	Work package 1: Community Requirements (feasibility)	30 May 2025	<p>Overall objective:</p> <ul style="list-style-type: none"> - Deep dive into communities' requirements for partner communities. - Full feasibility analysis for 2-3 communities most aligned with REACH goals. - Wider community engagement to better understand broader support requirements. - Development of user requirements and guidance for options support tool. <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Developing detailed requirements: working directly with our partner communities to finalise project details and identify recommendations and next steps for communities to progress their projects. 	£144,368

¹⁶ As outlined in in the Application or Project Plan appendix.

			<ol style="list-style-type: none"> 2. Feasibility assessment: conducting full feasibility assessments for 2-3 of the partner communities to determine applicability of REACH energy centre. 3. Wider cohort engagement: supporting broader engagement and knowledge exchange with the wider community cohort initially engaged in the Discovery Phase (70+) as potential users of the Options Assessment Tool we will develop in beta 4. Define user requirements for options support tool: consolidating insights from wider community engagement and 1:1 engagement with the 8 communities. 	
Milestone 2	Work package 2: Capability Led Network Assessment	30 May 2025	<p>Overall objective: Understand where rural networks are likely to be overloaded and develop operational scenarios for where REACH energy centre would provide benefit over Counterfactual</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Where and when are overloads likely to happen based on existing network forecasts. 2. Likely resolutions using existing policies and solutions 3. Costs and timescales relating to outputs of 2. 1. 4. Gap analysis of costs and benefits of using REACH alternative. 	£11,750

Milestone 3	Work package 3: Energy System breakpoints	30 May 2025	<p>Overall objective: Establish a process diagram for communities to follow when initiating community energy projects.</p> <p>Key tasks: 1. Repackage the WP-A2 D2.1 report into a community friendly format including process diagrams and scenario maps</p>	£18,300
Milestone 4	Work package 4: Review of alternative delivery options	30 May 2025	<p>Overall objective: Establish alternative delivery options for community energy developments according to key network parameters</p> <p>Key tasks: 1. Identify SGC and NGED stakeholders to input into delivery options framework 2. Organise workshop to explore options and conditions under which are more/less appropriate 3. Draft insights into summary report to inform development of Community Low Carbon Options Assessment Tool</p>	£15,732
Milestone 5	Work package 5: Community Low Carbon Options Assessment Tool	30 May 2025	<p>Overall objective: Provide a structured framework specifying the calculations, interconnections, and dependencies for the community decision-making tool to be built during the REACH Beta phase.</p>	£27,450

			<p>Key tasks:</p> <ol style="list-style-type: none"> 1. Develop the decision tree architecture based on inputs, required calculations and outputs 2. Determine community energy use profiles 3. Define community input data 4. Define network constraint data 5. Define Energy Centre parameters 6. Identify data sources necessary to support process flow diagram and method of incorporating into future tool (Beta phase) 	
Milestone 6	Work package 6: REACH Energy Centre – Technical design	30 May 2025	<p>Overall objective: REACH energy centre data analysis</p> <p>Key tasks: Provide data input and output flows for use in the tool by considering:</p> <ol style="list-style-type: none"> 1. Identification of all energy centre community support tool data requirements 2. Testing for the community to provide the necessary data (REGEN support) 3. Support to SGC for providing data dependencies and weights for the tool 	£27,287

			<ol style="list-style-type: none"> 4. Producing data dependency document write up including beta support 	
Milestone 7	Work package 7: Heat Network – Feasibility assessment	30 May 2025	<p>Overall objective: Support the selection of sites where a shared heating solution is proposed; establish the techno-economic feasibility of a shared heating solution at each site; determine a high level technical solution enabling central coordination of distributed heat pumps to minimise network load.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Define data related to community heating solution as input to characterisation of community sites 2. Undertaking high level feasibility studies for shared heating solutions at each community site, incorporating high level geological suitability assessment 3. Support to SGC and VEPOD in determining how individual heat pump controls can interact with the REACH energy centre to deliver network benefit 4. Assess likely peak electrical load of networked heat pumps, and technical control strategies for mitigating peak load risk 5. Refinement / extension of high level feasibility studies for two or three sites chosen to be examined in greater depth 	£47,340

Milestone 8	Work package 8: Commercial Model	30 May 2025	<p>Overall objective: Generate commercial and ownership models for the REACH energy centre, and produce a CBA workbook to evaluate it's economic feasibility.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Understand the intervention and the counterfactual: collaborate with other partners to obtain information on the operating parameters of the energy centre. Develop a broad counterfactual to assess what the DNO would do in the absence of the Energy Centre. 2. Generate Commercial/ownership models: define which entities own which assets, which payments are sent/received and the broad structure of the contracts. Illustrate how individual modules of the energy centre would fit together and shortlist a number of business models using the business model canvas framework. 3. Build illustrative model to demonstrate financial flows: build a simple spreadsheet to quantify the financial flows starting from the usage of the system and revenues available. This would also include illustrative calculations of the value of flexibility services, drawing on sources such as the Revenue Stacking for Flexibility report illustrating the extent to which different ancillary services can stack. 4. Produce CBA model: Populate the SIF CBA framework using the outputs from the illustrative financial model. This will involve referring back to the commercial model and counterfactual to 	£49,739
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			determine which benefits will ultimately flow to the DNO and its customers and the social and environmental benefits which do not flow to the DNO but should be valued.	
Milestone 9	Work package 9: Carbon Accounting	30 May 2025	<p>Overall objective: Develop methodology for a carbon assessment decision support tool to assess and compare carbon impacts of the baseline case and the proposed solutions.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Assessment of data requirements and sources - we will undertake a rapid evidence assessment that will review the academic and grey literature for available data on the environmental impacts of low carbon technologies (heat pumps, electric vehicles, solar panels etc). This will also include assessment of data and information on energy consumption in rural areas (e.g. ONS statistics on building stocks, household characteristics) 2. Development of carbon assessment tool layout and its testing and validation with the communities - initial conceptual layout of the decision support tool (e.g. typology and number of buildings involved, heating fuel consumption, transport demands) will be discussed, tested and validated with the communities via focus 	£45,901

			<p>groups (N=2-3 to capture different typology of rural areas and with N=6~8 participants)</p> <p>3. Development of methodology for a carbon assessment decision support tool for communities - synthesising insights, the conceptual methodology for the decision support tool will be developed</p>	
Milestone 10	Work package 10: Project Management and Development of Beta Phase	30 May 2025	<p>Overall objective: Perform Project Management tasks, author a detailed project plan and outputs for subsequent Beta phase including detailed budget requirements.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Perform Project Management tasks including weekly meetings, Programme and risks governance documentation updates as required. 2. Prepare business case 3. Develop Beta project plan 4. Develop benefit metrics and measurement 5. Develop project governance agreement for Beta phases 6. Develop required costing and Gantt 	£102,150

14. USE OF LOGO

The Funding Party and the Project Partners, External Funders and Project Supporters or subcontractors¹⁷ must not use the Innovate UK/UKRI and/or Ofgem logo for purposes associated with the Project in any circumstances.

As an alternative for use of both Ofgem and UKRI logos, all external Project communications must include the following standard form of wording:

- (i) "this project is funded by network users and consumers under the Strategic Innovation Fund, an Ofgem programme managed in partnership with UKRI."

For additional guidance, refer to the communications and media guidelines for competition winners, detailed as part of your delivery pack. These guidelines are designed to help with some suggestions and encourage you to take a proactive approach to communicating about your Project.

15. SHARING OF LESSONS LEARNED

The Funding Party is required to ensure that the sharing of lessons learned and the facilitation of knowledge transfer is conducted as effectively as possible, to ensure that all parties, and therefore all consumers including future consumers, can benefit from Projects.

As contained within Chapter 3 of the SIF Governance Document, we require the Funding Party to work collaboratively to maintain the ENA Smarter Networks Portal so that all reporting and dissemination of learnings on Projects (as required by chapter 6 of the SIF Governance Document) is available via the ENA Smarter Networks Portal.

16. COLLABORATION

The Funding Party must collaborate with third-party innovators as Project Partners, as well as work closely with other parties in the energy supply chain, as set out in Chapter 3 of the SIF Governance Document.

The Funding Party must collaborate with other parties and with UKRI to organise an annual conference in a format appropriate to enabling the building of consortiums and disseminating learning widely. The conference may be a single event for gas and electricity, or more than one event, as appropriate.

¹⁷ As detailed in the Application.

17. AMENDMENT OR REVOCATION

As set out in Chapter 7 of the SIF Governance Document, this SIF Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Party considers that there has been a material change in circumstance that requires a change to the SIF Project Direction, and the Authority agrees; or
- (ii) to reflect amendments made to the Licence.

18. HALTING OF PROJECTS

This SIF Project Direction is subject to the provisions contained in Chapter 7 of the SIF Governance Document relating to the halting of Projects. By extension, this SIF Project Direction is subject to any decision by the Authority to halt the Project to which this SIF Project Direction relates and to any subsequent relevant SIF Funding Direction issued by the Authority pursuant to Special Condition 9.9 of the Electricity Distribution Licence.

Further to the requirements in Chapter 7 of the SIF Governance Document, in the event the Authority decides to halt the Project, to which this SIF Project Direction relates, the Authority may issue a statement to the Funding Party clarifying the effect of that halting decision as regards to the status and legal force of the conditions contained in this SIF Project Direction.

NOW THEREFORE:

In accordance with the SIF Governance Document issued pursuant to Special Condition 9.9 of the Electricity Distribution Licence of the Licence the Authority hereby issues this SIF Project Direction to the Funding Party in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.

Failure to comply with the conditions of this SIF Project Direction means that Ofgem may treat all or part of the SIF Approved Amount received by the Funding Party as SIF Disallowed Expenditure.

ANNEX 1: PROJECT BUDGET

Cost Category	Total Project costs (£)
Labour	£556,616
Materials	£6,000
Subcontracting	£25,075
Travel and subsistence	£13,475
Other costs	£25,566
Total	£626,732

Project Partner	Total project costs (£)	Project contribution (£)	Total SIF Funding requested (£)	Project contribution (%)
NATIONAL GRID ELECTRICITY DISTRIBUTION (SOUTH WEST) PLC	£47,560.00	£4,756.00	£42,804.00	
Cranfield University	£57,376.00	£11,475.00	£45,901.00	
FRONTIER ECONOMICS LIMITED	£55,265.00	£5,526.00	£49,739.00	
KENSA UTILITIES LIMITED	£52,725.00	£5,385.00	£47,340.00	
REGEN SW	£171,475.00	£17,147.00	£154,328.00	
SMART GRID CONSULTANCY LIMITED	£206,050.00	£83,432.00	£122,618.00	
VEPOD LTD	£36,281.00	£8,994.00	£27,287.00	
Total	£626,732.00	£136,715.00	£490,017.00	28%

ANNEX 2 TO SCHEDULE: TEMPLATE OF BANK ACCOUNT DETAILS TO BE PROVIDED TO EITHER NGT (BOX.GSOSETTLEMENTS@NATIONALGRID.COM) OR NG ESO (revenue.invoice@nationalgrideso.com)

Company name:

Primary Contact Details (only one contact permitted)

First Name:

Last Name:

Email address:

Mobile phone number:

Work phone number:

Address details

Address name:

Street address:

City:

State / region:

Post code:

PO box: (if applicable)

PO box post code: (if applicable)

Banking details

These should be evidenced in non-editable format. The evidence provided must show company name and bank details and it should be dated within the last 6 months.

Any of the below documents will suffice:

- Bank statement (scanned document)
- Void cheque
- Paying in slip
- Screenshot of online banking (showing a logged in account with bank account and sort code, with browser visible)