

Governance, Risk and Best Value Committee

10.00am, Thursday, 9 March 2017

Roads Contract Management: Follow up

Item number	7.5
Report number	
Executive/routine	
Wards	

Executive summary

In audit SFC1505: Roads Contract Management issued in April 2016, Internal Audit reported on the findings of a review of the Council's controls over scheduling and delivering maintenance and improvement works.

There were two high risk findings relating to budgetary control and quality assurance arising from our original review, and four medium risk findings. This is an update on management's progress in implementing the actions they proposed to address the weaknesses identified by Internal Audit.

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Roads Contract Management: Follow up

1. Recommendations

- 1.1 It is recommended that the Committee notes this report.
- 1.2 It is recommended that the outstanding actions from audit SFC 1505: Roads Contract Management are closed as they have been superseded by the Edinburgh Roads Service (ERS) Improvement Plan.
- 1.3 It is recommended that the Committee notes that the Portfolio and Governance team within Strategy and Insight, will include the ERS Improvement Plan within the portfolio of projects that they support and assure going forwards.
- 1.4 It is recommended that the Committee notes that Internal Audit will undertake a review of the service delivery model proposed under the ERS Improvement Plan in Quarter 3, 2017/18.

2. Background

- 2.1 In audit SFC1505: Roads Contract Management, Internal Audit reported on the findings of a review of Council's controls over scheduling and delivering maintenance and improvement works. Testing during the audit was limited to work completed by the internal Edinburgh Roads Service (ERS), and commissioned by the West Neighbourhood Office. The auditor also considered the processes used by the Transport Design and Delivery team (TDD) to manage works carried out by ERS.
- 2.2 There were two high risk findings relating to budgetary control and quality assurance arising from our original review, and four medium risk findings. West Neighbourhood Office, ERS and TDD between them proposed 16 actions to address the weaknesses identified by Internal Audit.
- 2.3 Both high risk findings and two medium risk findings remained open at the date of our last quarterly reporting to GRBV in December 2016. The original implementation date for the actions attached to these findings was June 2016. Given the length of the delay in implementing these actions, on 22 December GRBV requested an update on progress.

3. Main report

Follow Up Audit

- 3.1 Internal Audit conducted a follow up review during which we interviewed officers from ERS, TDD, and the North West Locality Transport and Environment team and inspected documentation for a sample of jobs in order to assess progress in implementing the agreed management actions. Our detailed assessment of the current status of each action can be found in Appendix 1.
- 3.2 As with the original audit, we only considered jobs commissioned by the North West Locality or TDD where ERS was the contractor.
- 3.3 A number of actions which had been closed previously were reopened as a result of this follow up audit work either because the services have not continued agreed actions after they were closed, or because actions had been progressed by TDD but have not been rolled out to the Localities. Actions which were closed in December 2016 are indicated by an asterisk in Appendix 1.
- 3.4 The central TDD manages medium and large capital improvement works across the City, which they commission either ERS or a framework contractor to complete.
- 3.5 Locality Transport and Environment teams manage revenue works, such as pothole repairs, and small capital works using the local capital budget and as part of the Neighbourhood Environmental Programme. Locality teams commission ERS to carry out most revenue and small capital works.
- 3.6 It became apparent during our follow up audit work that the open audit actions were indicators of fundamental operating issues being experienced by the Roads Maintenance and Improvement programme in the Localities. The process is not currently operating effectively.
- 3.7 We have identified four areas where there are fundamental issues in operational practices in the Localities and at ERS, and in relationships between ERS and its clients that need to be addressed if the Council is to deliver an effective roads maintenance and improvement programme.

People
<p><u>Collaboration</u></p> <p>Engineers in the TDD are experienced in delivering capital improvement works and managing external contractors. They have a robust Quality Management System, and addressed audit recommendations on budgetary control when ERS are used, and joint working with Localities to prioritise and schedule works by the agreed implementation date.</p>

However, there has not historically been a culture of collaborative working between TDD, ERS and the Localities. The Localities have not benefited from the in-house expertise of the TDD: for example, the Quality Management System is not in use in the Localities.

There is evidence this is being partially addressed with monthly meetings between Localities Transport and Environment managers and TDD, strategic planning involving both the Localities and TDD, and the appointment of experienced officers from TDD to the Localities. However, building effective working relationships across the Council's roads teams must be a key part of the ERS/Roads Improvement Programme.

ERS Commercial Team

ERS does not currently have a Commercial Team or Works Programmer in post. This has delayed work to develop a schedule of rates for improved transparency over interdepartmental billing (see 'Finance'). It also means that monthly co-ordination meetings between Locality Transport and Environment Teams and ERS have ceased, and there is no ERS representation at monthly planning meetings with TDD.

ERS is currently recruiting for the Commercial Manager position to address this gap.

Loss of experience

A significant number of staff left both ERS and the Localities under VERA. Posts in the new structures are now being filled, but there does not appear to have been effective planning to capture accumulated knowledge and experience before staff left. There appear to be skills gaps in both services, particularly around financial and project management, with a loss of service specific knowledge causing difficulties in delivering the Roads Maintenance and Improvement Programme as illustrated below (see 'Confirm').

Systems

There are three different systems used across the roads services. They are not integrated.

Confirm

Confirm was introduced in 2013 as a works management system. It is used by the Localities to commission both revenue and capital works: works orders are issued to ERS, who are expected to pick them up and log work in real time using handheld devices.

Use of Confirm halted over the summer, as staff with access to the system left ERS under VERA. It is now being used again by both ERS and the Localities, but it is recognised that staff using it have had only rudimentary training (trained 'superusers' have left the Council) and do not make full use of its capabilities. It is not fully embedded into Locality or ERS working practices, which means the service is not capturing the full efficiency benefits of the system.

The contract with the system providers ends in 2018, after which point the system will be unsupported unless the contract is extended.

Axim

Axim is used by ERS to record costs and charge the Localities and TDD for labour, plant and materials. There is no link between Axim and Confirm, and different job references are used which makes it difficult for the Localities to reconcile the two systems and monitor costs.

To illustrate this, during our follow up work we were given both Confirm and Axim job codes for five small capitalised projects by the North West Locality, but when checked with ERS, we found those codes related to different projects, and in one case did not exist.

On our return visit to the North West Locality as part of the follow up work, team leaders no longer had access to Axim which means they can no longer monitor project costs, such as daily labour costs, in real time but must rely on reports generated by ERS on request. Given the Localities are billed labour, plant and materials item by item and, as noted above, project codes do not reconcile, it is difficult for the Localities to verify the accuracy of charges and challenge errors retrospectively.

Telford

Telford is the works management system used by the central TDD team for all capital works. It is not integrated with Axim. While the system is functional and is adequate for the capital portfolio which has a relatively limited number of projects each year, it is old, is not user friendly, and is only capable of producing limited management information. It would not be suitable for the volume of revenue and small capital works handled by the Localities each year.

Finance

Our audit identified that there was little transparency over interdepartmental billing between ERS and its clients. There has limited progress in the past year, and the weaknesses reported in audit SFC1505 still apply:

- There is no schedule of rates for works carried out by ERS. This means it is difficult for Localities to estimate the cost of works, and to determine whether they have been charged accurately or whether works have been delivered to budget;
- ERS are not required to obtain approval from the commissioning manager for an extension to approved works, or where additional labour, plant or materials are required;
- As ERS is part of the Planning and Transport service, payment for labour, plant and materials is by internal transfer which does not have to be authorised by the commissioning manager from the Transport department or the Neighbourhood Office; and
- The additional costs of any remedial works are charged to the commissioning roads teams on top of the original budget. They are not able to reclaim those costs from ERS.

Developments – Transport Design and Delivery team

TDD have agreed a protocol with ERS which states that costs must be agreed at planning. The price of the project is determined by reference to the schedule of rates for the external framework contract.

This has been trialled on one project to date. A price was agreed between ERS and

the Senior Engineer, but ERS required support from TDD in applying the schedule of rates appropriately as they do not yet have the in-house commercial experience to price a job (see 'People' above).

While a protocol has been agreed for billing, stating that requests for payment must be submitted by ERS and checked and approved by the TDD commissioning manager, no project has yet reached this stage. It is not yet clear how TDD/ERS will facilitate pre-approval of payments with the current Council systems (see above).

Developments – Localities

On our return visit to the North West Locality, we found that ERS charges for medium and large revenue works are now often billed to a 'bucket code'. It has therefore become even more difficult to reconcile charges to individual projects, making it practically impossible to monitor the costs of individual jobs.

The billing protocol agreed between TDD and ERS has not been rolled out to the Localities.

Schedule of Rates

ERS recognise the need for a schedule of rates, and intend to develop and introduce one for the new financial year. This project has been delayed to date due to difficulties in recruiting a Commercial Team.

Quality

TDD use a robust Quality Management System, with well documented evidence of site visits and sign off by TDD engineers at key stages of each project, and daily site diaries completed by the clerk of works.

The Quality Management System for roads repairs and renewals was developed for use across the Council's roads services. However, while Localities Transport and Environment Teams indicated that they do carry out regular site visits, they were unable to provide evidence of these visits, or key documents such as project acceptance, site diaries or site-specific Health and Safety risk assessments.

N.B. Generic Health and Safety risk assessments for each type of repair are available and reviewed annually.

Going forward

- 3.8 Place recognises that work is required to accelerate improvement in the condition of Edinburgh's roads and improve public perception. An investment strategy has been developed to consider how this can be delivered collaboratively between the Central Infrastructure teams, the Locality Roads Teams and ERS. A Roads Asset Management Plan will be presented to the Transport and Environment Committee in 2017.
- 3.9 An Improvement Plan is underway at ERS to transform working practices and make the service competitive with framework providers. This will include introducing a schedule of rates so work can be priced more accurately and to make it easier for client services to monitor budgets. It will also review how ERS works with its client services (being TDD and the Localities). The timescale for completing the Improvement Plan is c.18 months.

- 3.10 We propose that the actions from audit report SFC1505 and CW1503 (which also pertain to ERS) are closed and are not tracked in future Internal Audit quarterly follow up reports. While they were appropriate responses to the control weaknesses identified at that time, the deterioration in the service is such that a comprehensive redesign is required (the ERS Improvement Plan) and there is little value in tracking what are likely to become obsolete recommendations.
- 3.11 The Strategy and Insight, Portfolio and Governance team will include the ERS improvement plan within the portfolio of projects that they support going forward. This will facilitate an appropriate level of scrutiny of the ERS Improvement Plan as it develops.
- 3.12 We have agreed with the ERS Senior Manager that Internal Audit will conduct a 'review recommend' of the proposed service delivery model in October 2017, before it is fully embedded. This review will focus on project management and interaction with the Locality Transport and Environment teams.
- 3.13 An early 'review recommend' is appropriate for a service in development as it allows the service to address potential control weaknesses before working practices are entrenched. This would normally be followed by a risk and controls based internal audit 12-18 months later to verify that the new processes and controls are operating effectively.

4. Measures of success

- 4.1 Improvement in control environment identified in 'review recommend' of Edinburgh Roads Service Improvement Plan in Quarter 3 2017/18.

5. Financial impact

- 5.1 No direct financial impact.

6. Risk, policy, compliance and governance impact

- 6.1 The findings of the work performed by Internal Audit should inform the development of the Edinburgh Roads Service Improvement Plan.

7. Equalities impact

- 7.1 There are no adverse equalities impacts arising from this report.

8. Sustainability impact

8.1 There are no direct adverse sustainability impacts arising from this report.

9. Consultation and engagement

9.1 The Internal Audit team consulted with representatives from Edinburgh Roads Services, the Transport Design and Delivery team, and the North West Locality in conducting this follow up review.

10. Background reading / external references

10.1 None.

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Links

Coalition pledges

Council outcomes

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Appendices

Appendix 1 – Status of Actions from SFC1505: Roads Contract Management

Finding	Business Implication	Finding Rating	Recommendation	Management Action	Responsible Officer	Estimated Implementation Date	Status	Comments
<p>There is no consistent or robust process for managing the costs of works undertaken by ERS. Through discussions with officers at the West Neighbourhood Office and the Central Transport department we noted that:</p> <ul style="list-style-type: none"> • There is no schedule of rates for works carried out by ERS. This means budgets for works cannot be completed accurately; • ERS are not required to obtain approval from the commissioning manager for an extension to approved works, or where additional labour, plant or materials are required; • As ERS is part of the Planning and Transport service, payment for labour, plant and materials is by internal transfer which does not have to be authorised by the commissioning manager from the Transport department or the Neighbourhood Office; • There was no evidence retained that costs charged by ERS are reviewed by the commissioning manager; • Costs are recorded on Axim, while the estimated works budget is recorded on the Confirm project management system. There is no link between the systems, so budget variances must be calculated manually; and • The additional costs of any remedial works are charged to the commissioning roads teams on top of the original budget. They are not able to reclaim those costs from ERS. 	<ul style="list-style-type: none"> • Service is unable to demonstrate compliance with Contract Design Management regulations; • Budgets for proposed works may be inaccurate; • Local area roads managers do not have accurate financial management information; and • ERS are not financially accountable for poor quality work. 	HIGH	<p>The road and footway contract process should include robust monitoring of contract expenditure. This should include:</p> <ul style="list-style-type: none"> • Accurate budgeting of work assisted by a schedule of rates; • Documented approval of variations to agreed work; • Exception reporting to highlight overspend against budget; and • End of works review of expenditure to ensure commissioning managers are satisfied that all work and costs are appropriate. 	For Locality (Revenue) Work, estimated costs are prepared and noted on Confirm (Works Management System) making use of compound rates. Ensure that future works estimates make use of agreed and future schedule of rates.	North West Local Transport and Environment Manager	01-Jun-16	No progress	<ul style="list-style-type: none"> • Localities estimate the cost of works using compound rates, but are billed itemised works and labour costs by Edinburgh Roads Service (ERS). The two do not reconcile. • Team leaders in the locality visited no longer have access to Axim (the billing system used by ERS) to monitor costs independently. Costs are billed to a 'bucket code' so cannot be reconciled to individual jobs. • ERS intend to develop a schedule of rates to be used by both the localities and ERS for the new financial year. However, it is not clear that they have the resources to do this given key posts are unfilled, or that the systems will support this.
				For Locality (Revenue) Works, introduce a protocol to ensure that additional works are agreed, where reasonably possible, with the Commissioning team prior to commencement.	North West Local Transport and Environment Manager	01-Oct-16	No progress	<ul style="list-style-type: none"> • Variation orders are prepared and authorised where additional works are required on capital works managed by the Transport Design and Delivery team (TDD), whether the contractor is external or ERS. This was already in place at the time of our audit. • This protocol has not been adopted by the localities for capital works managed locally, or adapted for revenue works.
				For all Capital and Revenue Work, introduce an internal contract process to manage works estimating, charging, completion sign off by the client and final account closure.	Transport and Infrastructure Manager	01/10/2016*	In progress	<ul style="list-style-type: none"> • An internal contract process has now been developed by the Transport Design and Delivery team for capital work they assign to ERS. • This protocol has not been adopted by the localities for revenue works and capital works managed locally.
				Establish remedial works protocol to ensure Commissioning teams are not charged for defective works.	Edinburgh Road Services Manager	01-Oct-16	No progress	Both TDD and the localities are still billed automatically for remedial works on top of the original budget. They cannot reclaim these costs.
<p>Reviews undertaken by the Transport Interim Quality Audit Team identified works and materials failures resulting in major remedial works at additional cost to the Council. The Transport Interim Quality Audit Team was a short-life working group and has now been disbanded.</p> <p>Officers were unable to demonstrate that site visits are carried out as a matter of routine by project or commissioning managers to confirm that the quality and extent of works completed are satisfactory</p>	<ul style="list-style-type: none"> • There is a risk that road and footway works fail due to poor quality construction resulting in an additional cost to the Council for remedial works; and • Loss of neighbourhood partnership and community support due to extended road works and poor condition of carriageways. 	HIGH	<p>An end of works quality assessment should be conducted and documented before final payments are made to contractors and ERS.</p> <p>This review should be carried out by a qualified member of staff who can assess the work carried out against the industry standards and contract requirements.</p>	Recommendation accepted - ongoing site visits to be adequately recorded and final quality inspection process to be developed, by the Locality Transport teams, for appropriate works.	North West Local Transport and Environment Manager	01-Jun-16	No progress	<ul style="list-style-type: none"> • Locality officers stated that site visits are carried out for capital and large revenue works (as was indicated at the time of our audit), however site diaries are not kept and there are no records to demonstrate these happen. • There is a Council Quality Management System which is still followed by the TDD, but is no longer used by the Localities.
				Sample Inspections for Revenue works (commissioned by Locality Teams) are currently undertaken and will be recorded through Confirm. (Audits of above to be undertaken to ensure compliance).	North West Local Transport and Environment Manager	01-Jun-16	No progress	No evidence of sample inspections of minor revenue works delivered by EBS for the localities.
				Site visits (and Final Inspections) to be carried out by commissioning teams for all Capital schemes and significant revenue works.	Transport and Infrastructure Manager	01/06/2016*	Complete	The TDD has a well-documented programme of site visits for each project, including daily site diaries completed by the clerk of works, photographs, pre-design and design visits, final inspections, and a visit 10 months after the project is completed.
<p>A sample of 9 projects in 2013 and 2014 commissioned by the West Neighbourhood Office was selected in order to confirm that the process and key controls were operating effectively from design and commissioning to completion. Officers were unable to provide documents during the audit for 7 of the 9 projects selected to demonstrate that key contract and legislative requirements had been met, including:</p> <ul style="list-style-type: none"> • Works order with scope of work and costings; • Health and Safety risk assessments; • Project acceptance by a senior officer in the Neighbourhood Office; • Project acceptance by Edinburgh Roads Service; • Inspection of completed works by the project manager; and • Final sign off of completed works by a senior officer in the Neighbourhood Office. <p>The documents should have been retained to comply with the Council's Record Retention policy. It was unclear if they had ever existed and if so, whether they had been destroyed or archived in a manner which made them difficult to recover. Officers were able to provide some documents after the audit.</p> <p>We note that the samples tested predate the introduction of the new works management system,</p>	<ul style="list-style-type: none"> • Service is unable to demonstrate compliance with Contract Design Management and Health and Safety regulations; • Failure to comply with Council Records Management policy; • Insufficient management information to allow Service and contractor performance to be monitored effectively; and • Poor record keeping impairs accountability for service delivery. 	HIGH	<p>The process for commissioning and managing road and footway maintenance undertaken by ERS should be mapped, with key documents such as a schedule of works, a health and safety risk assessment and final project sign off identified.</p> <p>Key documents must be retained in accordance with the Council's records management policy.</p>	Recommendation accepted - A number of Contract records have been provided to the Auditor retrospectively as individuals involved in the audit were not responsible for commissioning. N.b. 9 Schemes selected date from 2013 and 2014.	n/a	n/a	n/a	n/a
				Management of internally commissioned works to ERS is now administered on a formal Works Management System (Confirm). Records relating to asset management, works orders, estimates and completion now recorded on Confirm.	North West Local Transport and Environment Manager	'Complete'*	No progress	There was minimal works documentation on Confirm. Works instructions and dates on site were recorded for the project reviewed, but there was no evidence of Health & Safety risk assessments, costed works or site inspections.

Finding	Business Implication	Finding Rating	Recommendation	Management Action	Responsible Officer	Estimated Implementation Date	Status	Comments
We identified cases where a works order was not closed at the end of the project. This meant the job code remained open, and the Edinburgh Roads Service had the ability to charge costs against it.	• There is a risk that additional costs are charged to completed projects which are no longer monitored.	MEDIUM	All projects should be closed as soon as the final payment is approved. A review of open projects should be undertaken to identify projects where works are complete and the final payment has been agreed, to ensure no further costs have been charged.	Introduce formal internal contract process to manage works estimating, charging (Schedule of Rates), completion sign off and final account closure for all Capital works and significant Revenue works.	Transport and Infrastructure Manager	01/10/2016*	In progress	<ul style="list-style-type: none"> An internal contract process has now been developed by the Transport Design and Delivery team for capital work they assign to ERS. A budget for works agreed in advance, but has not yet been tested through to completion. This protocol has not been adopted by the localities for revenue works and capital works managed locally.
				Works orders to be closed within 4 weeks of work finishing on site, unless alternative period agreed between ERS and commissioning managers.	Edinburgh Road Services Manager	01/06/2016*	Complete	Selected 5 completed jobs and confirmed works orders were closed.
<p>The Local Area Offices programme works on an annual basis, once their budget allocation for the financial year is confirmed. Programming is hindered by the length of time taken to complete the planning and design process.</p> <p>These delays affect the ability of ERS to complete work within the financial year and mean framework contractors are increasingly instructed to complete works for Local Area Offices. Local revenue budgets cannot be carried forward, while capital budgets can be carried forward for 3 years.</p> <p>We also noted that while 3-year capital programmes are circulated to the Neighbourhoods annually, co-ordination of corporate and local area capital programmes is limited. This increases the likelihood of duplication of works, inefficient use of resources and delays in contractor availability.</p>	<ul style="list-style-type: none"> There may be inefficient use of Council resources where works are not prioritised effectively and co-ordinated across the Council; Programmed works cannot be completed due to delays. 	MEDIUM	<p>A review of Road and Footway works programming should be undertaken to identify the current blockages and duplication in the process, and to identify opportunities for co-ordination between the central capital programme, Local Area Offices and ERS. Amendments should be made to the current process based on the outcomes of this review to improve the efficiency and effectiveness of the road and footway works programme.</p>	Formal monthly co-ordination meetings to be arranged to agree future Capital and Revenue Works (involving Roads Renewal Manager, Area Roads Managers and ERS Works Programmer).	Transport and Infrastructure Manager	01/06/2016*	In progress	<ul style="list-style-type: none"> Monthly co-ordination meetings take place between the Roads Renewal Manager and Area Roads Managers to agree future capital works, and revenue works where they can be co-ordinated with known capital works. The ERS Works Programmer post is vacant, so there is no ERS representative at these meetings. Monthly co-ordination meetings between Area Roads Managers and ERS to agree revenue works and capital works managed by the localities began in July 2016, but have not continued as the ERS Works Programmer post is vacant.
				Annual programme meeting with (Roads Renewal Manager Transport Design & Delivery Manager, Area Roads Managers and ERS Works Programmer) to develop future year's Capital And Revenue Works Programme.	Transport and Infrastructure Manager	01/06/2016*	Complete	The Annual Programme Meeting to develop the Capital and Revenue Works Programme for 2017/18 took place on 24 November 2016.
				Formal ERS works planning and programming protocol to be introduced to improve project and budget planning for commissioning and ERS teams.	Edinburgh Road Services Manager	01/06/2016	No progress	This will be addressed as part of the ongoing review of ERS working practices in 2017/18.
<p>The Confirm works management system has been introduced to facilitate the process of scheduling, costing and contracting for roads contacts for revenue works.</p> <p>All new revenue works are planned and commissioned using Confirm as of December 2015. However at the time of the audit, Confirm had not been fully embedded across ERS and the Neighbourhood Offices.</p> <p>As a result, no revenue works commissioned by five of the six Local Area Offices have been included in the ERS works programme for Quarter 4 in 2015/16 as they had not been commissioned using Confirm. It is unclear when ERS will resume work for the Local Area Offices under revenue budgets.</p>	<ul style="list-style-type: none"> There will be delays in Local Area Office work programmes as planned works need to be re-commissioned and sent to external framework contractors; There may be a risk that delays lead to increase in the extent of repairs required; Increased health and safety risk to road and footway users due to delayed repairs; and There is a risk that Local Area Offices work programmes cannot be completed within the financial year when there is available budget. 	MEDIUM	<p>ERS and Neighbourhood staff should be trained in the use of the Confirm system, to enable ERS to carry out commissioned work. Training provided should take account of the abilities of staff who will be using the system and remote devices.</p> <p>Take-up of Confirm should be monitored to identify areas where further training is required.</p>	All commissioning teams to use Confirm for ERS Revenue works order management.	North West Local Transport and Environment Manager	01/06/2016*	No progress	Use of Confirm halted over the summer, as staff with access to the system left ERS under VERA. It is now being used again by both ERS and the Localities to issue and pick up works orders, but it is recognised that staff using it have had only rudimentary training (trained 'superusers' have left the Council) and do not make full use of its capabilities. It is not fully embedded into Locality or ERS working practices.
				Service Innovation team to assess Confirm roll out and support further development, training and support.				
				ERS staff have been trained in the use of Confirm system, however further training /support will be delivered for Neighbourhood Staff commissioning work through Confirm.	North West Local Transport and Environment Manager	01/06/2016*	No progress	